

02-8901-14-PA

REV. NO. 0

**FINAL DRAFT
PRELIMINARY ASSESSMENT
LILCO - HICKSVILLE OPERATIONS CENTER
HICKSVILLE, NEW YORK**

**PREPARED UNDER
TECHNICAL DIRECTIVE DOCUMENT NO. 02-8901-14
CONTRACT NO. 68-01-7346**

**FOR THE
ENVIRONMENTAL SERVICES DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY**

FEBRUARY 28, 1989

**NUS CORPORATION
SUPERFUND DIVISION**

SUBMITTED BY:

Joann L. Wagner
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PROJECT MANAGER**

Peter von Schondorf
**PETER VON SCHONDORF
SITE MANAGER**

REVIEWED/APPROVED BY:

Ronald M. Naman
**RONALD M. NAMAN
FACILITY MANAGER**

333572



POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT

PART I: SITE INFORMATION

1. Site Name/Alias LILCO - Hicksville Operation(s) Center
 Street 175 East Old Country Road
 City Hicksville State NY Zip 11801

2. County Nassau County Code 059 Cong. Dist. Unk.

3. EPA ID No. NYD006866008

4. Latitude 40° 45' 55" N Longitude 073° 30' 44" W
 USGS Quad. Hicksville

5. Owner Long Island Lighting Company Tel. No. (516)-420-6133
 Street 175 East Old Country Road
 City Hicksville State NY Zip 11801

6. Operator Long Island Lighting Company Tel. No. (516)-420-6133
 Street 175 East Old Country Road
 City Hicksville State NY Zip 11801

7. Type of Ownership
☒ Private ☐ Federal ☐ State
☐ County ☐ Municipal ☐ Unknown ☐ Other _____

8. Owner/Operator Notification on File
☐ RCRA 3001 Date _____ ☐ CERCLA 103c Date _____
☐ None ☒ Unknown

9. Permit Information

Permit	Permit No.	Date Issued	Expiration Date	Comments
<u>NYSPDES</u>	<u>NY0140261</u>	<u>Oct. 1987</u>	<u>Oct. 1992</u>	
<u>NYSPDES</u>	<u>NY0026344</u>	<u>Unknown</u>	<u>Unknown</u>	
<u>Air Emissions</u>	<u>Facility Code</u> <u>2824003108</u>	<u>Unknown</u>	<u>Unknown</u>	<u>Permit exists</u> <u>for an on-site</u> <u>incinerator.</u>
<u>6NYCRR Part 373</u>	<u>Unknown</u>	<u>Unknown</u>	<u>Unknown</u>	<u>LILCO has ob-</u> <u>tained a permit</u> <u>for the storage</u> <u>and handling</u> <u>of NY State</u> <u>Classified</u> <u>Industrial</u> <u>Wastes.</u>

Permit	Permit No.	Date Issued	Expiration Date	Comments
<u>Generator</u>	<u>NYD006866008</u>	<u>Nov. 1980</u>	<u>Until notified</u>	<u> </u>
<u>RCRA</u>				
<u>Part A</u>				
<u>Treatment,</u>				
<u>Storage,</u>				
<u>Disposal</u>	<u>NYD0006866008</u>	<u>Nov. 1980</u>	<u>Unknown</u>	<u> </u>
<u>RCRA</u>				
<u>Part 364</u>				
<u>Transporter</u>	<u>Unknown</u>	<u>Unknown</u>	<u>Unknown</u>	<u> </u>

10. Site Status

☒ Active ☐ Inactive ☐ Unknown

11. Years of Operation Prior to 1958 to Present

12. Identify the types of waste units (e.g., landfill, surface impoundment, piles, stained soil, above- or below-ground tanks or containers, land treatment, etc.) on site. Initiate as many waste unit numbers as needed to identify all waste sources on site.

Waste Unit No.

Waste Unit Type

1
2

Drum and bulk hazardous waste storage
Surface impoundments

13. Information available from

Contact Amy Brochu Agency U.S. EPA Tel. No. (201) 906-6802
Preparer Peter von Schondorf Agency NUS Corp. Date 1/30/89

PART II: WASTE SOURCE INFORMATION

For each of the waste units identified in Part I, complete the following seven items.

Waste Unit No. 1 - Drum and Bulk Storage of Hazardous Waste

1. Identify the RCRA permit status, if applicable, and the age of the waste unit.

The Hicksville Operations Center has obtained a RCRA Part A permit for the on-site storage of hazardous waste. LILCO stores the waste until large bulk shipments can be made to appropriate disposal facilities. The age of the waste units is unknown; however, the site has been RCRA-permitted since 1980. LILCO has also obtained a RCRA generator's permit and a RCRA Part 364 permit for the transportation of hazardous waste.

2. Describe the location of the waste unit and identify clearly on the site map.

There are several areas on the LILCO property that are permitted to store waste. The Chemical Hazardous Waste Storage Area is a fenced enclosure located adjacent to the outside storage area and west of the New South Road parking area. Other areas have been designated for the storage of petroleum hydrocarbons and PCB wastes, and are permitted under New York State industrial waste legislation or the Toxic Substances Control Act (TSCA). These areas include the 30-day temporary storage area, the Annex III PCB Storage Area, the General Shops Recycling Shop, and the Transformer Oil Reprocessing Facility.

3. Identify the size or quantity of the waste unit (e.g., area or volume of a landfill or surface impoundment, number and capacity of drums or tanks). Specify the quantity of hazardous substances in the waste unit.

The waste quantities indicated below are the average annual quantities generated by LILCO and are stored within the permitted waste storage areas.

1825 gallons of F001/F002 (halogenated solvent waste)

495 gallons of F003/F005 (nonhalogenated solvent waste)

2310 gallons of D001 (ignitable waste > 50 ppm PCBs and paint-related materials)

440 gallons of D002 (corrosive wastes)

5885 gallons of D009 (mercury-related waste)

100,000 gallons of oil with 50 to 500 ppm PCBs

20,000 gallons of oil with > 500 ppm PCBs

8,800 gallons of PCB-contaminated soil

150 cubic yards of bulk PCB solids

13 units, transformers with > 500 ppm PCBs

3,000 units, capacitors with PCBs

4. Identify the physical state(s) of the waste type(s) as disposed of in the waste unit. The physical state(s) should be categorized as follows: solid, powder or fines, sludge, slurry, liquid, or gas.

All waste is suspected to be in liquid form with the exception of PCB-contaminated soils and solids.

5. Identify specific hazardous substance(s) known or suspected to be present in the waste unit.
See item No. 3 of this section.
6. Describe the containment of the waste unit as it relates to contaminant migration via groundwater, surface water, and air.

All wastes are containerized in drums, aboveground tanks, or bulk storage containers. The wastes are stored in permitted areas that are specifically designed for the storage of waste and inspected regularly by state and federal agencies. As a result, the potential for contaminant migration via the groundwater, surface water, and air routes is minimized.
7. Identify any miscellaneous spills, dumping, etc. on site; describe the materials and identify their locations on site.

Documentation is not available citing the occurrence of spills or dumping on site other than those noted in the following section.

Ref. Nos. 1, 3, 4, 5, 6, 7, 8, 14, 15, 16, 17, 22

PART II: WASTE SOURCE INFORMATION

For each of the waste units identified in Part I, complete the following seven items.

Waste Unit No. 2 - Surface Impoundments

1. Identify the RCRA permit status, if applicable, and the age of the waste unit.

There are no pertinent RCRA permits governing this waste unit. LILCO uses a New York State recharge basin located adjacent to the Operations Center for the discharge of cooling tower effluent. The disposal of the effluent is controlled by New York State under State Pollutant Discharge Elimination System (SPDES) legislation. The age of the basin is unknown; however, LILCO has had a SPDES permit since 1978. Prior to 1983, effluent from the facility's sanitary outfalls was discharged into septic tanks using the same SPDES permit.

2. Describe the location of the waste unit and identify clearly on the site map.

The outfall pipe and recharge basin are located adjacent to the northeast portion of the LILCO property, south of and adjacent to Old Country Road and west of New South Road.

3. Identify the size or quantity of the waste unit (e.g., area or volume of a landfill or surface impoundment, number and capacity of drums or tanks). Specify the quantity of hazardous substances in the waste unit.

The waste quantity discharged into the recharge basin is approximately 200 gallons of effluent annually. This is a once-a-year discharge, released in the fall to prepare the cooling tower for winter storage. Analyses from 1987 indicate that the effluent contained 5.9 mg/L total suspended solids and had a pH of 7.62. The recharge basin has approximate dimensions of 1000 feet by 500 feet and a depth of 20 feet.

4. Identify the physical state(s) of the waste type(s) as disposed of in the waste unit. The physical state(s) should be categorized as follows: solid, powder or fines, sludge, slurry, liquid, or gas.

The physical state of the waste present within the recharge basin is liquid.

5. Identify specific hazardous substance(s) known or suspected to be present in the waste unit.

Prior to 1983, LILCO used its SPDES permit to discharge sanitary and floor drain waste, and cooling tower effluent into the ground. The total daily amount of discharge was approximately 100,000 gallons; the discharge contained a variety of substances such as detergents, solvents, and small amounts of oil and grease. Prior to 1982, LILCO was permitted to discharge dodecyl guanidine hydrochloride, Aminotroi (methylene phosphoric acid), and isopropanol from the cooling tower into the basin. In 1983 all waste, with the exception of cooling tower effluent, was directed to a municipal sewerage authority.

6. Describe the containment of the waste unit as it relates to contaminant migration via groundwater, surface water, and air.

The basin is specifically designed to allow the migration of water into the groundwater and evaporation to the air. Since the outfall pipe from the cooling tower discharges directly into the basin, surface water contamination is not a concern.

7. Identify any miscellaneous spills, dumping, etc. on site; describe the materials and identify their locations on site.

A spill of waste oil within the Transportation Building in 1980 resulted in the contamination of the building's septic system. The oil spread throughout the system prior to its cleanup, possibly contaminating the leaching field soils. Soil samples were collected to determine whether oil contamination had occurred.

The results of the sampling are unknown. The Nassau County Health Department inspected the site several times during cleanup activities.

Ref. Nos. 1, 3, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20

PART III: HAZARD ASSESSMENT

GROUNDWATER ROUTE

1. **Describe the likelihood of a release of contaminant(s) to the groundwater as follows: observed, alleged, potential, or none. Identify the contaminant(s) detected or suspected, and provide a rationale for attributing the contaminant(s) to the facility.**

There is a potential for groundwater contamination. LILCO has been using on-site sanitary septic systems (septic tank and leach fields) or the adjacent recharge basin for the disposal of liquids and sanitary waste since at least 1958. Also, the incidental or intentional spillage of any hazardous substance on site may contaminate the site's groundwater. Contaminants most likely to be found are PCBs, halogenated and nonhalogenated solvents, and mercury. These substances are commonly used on site for the maintenance, repair, and testing of LILCO's equipment.

Ref. Nos. 1, 2, 4, 5, 6, 10, 11, 12, 13, 14, 22

2. **Describe the aquifer of concern; include information such as depth, thickness, geologic composition, permeability, overlying strata, confining layers, interconnections, discontinuities, depth to water table, groundwater flow direction.**

The aquifers of concern are the Upper Glacial and Magothy. The Upper Glacial aquifer consists of interbedded deposits of glacial sediments: till, outwash sand and gravel, and lacustrine sand, silt, and clay. In the site area the Upper Glacial is underlain by the Magothy aquifer, which is a major source for Long Island municipal drinking water. The Magothy consists of lenticular beds of gravel, sand, silt, and clay. Overlying the Upper Glacial are Holocene sediments which may include sand, gravel, silt, clay, and fill. In the site area, much of the Holocene sediment has been disturbed by construction activity. The stratigraphy of the site area indicates that there are no natural barriers to groundwater flow, and as a result, groundwater may flow freely between aquifers.

In the site area the Upper Glacial aquifer is approximately 100 feet thick and found at approximately 69 feet below the site's ground surface. Groundwater is also found at a depth of approximately 69 feet. A variety of sediment types can be found within the aquifer, and as result, a wide range of permeabilities can be expected. Assuming wells will be screened in the coarsest aquifer material, permeabilities greater than 10^{-3} centimeters per second can be expected. The regional groundwater flow direction for the aquifer in the site area is southerly.

Ref. Nos. 17, 19, 20, 21

3. **Is a designated sole source aquifer within 3 miles of the site?**

Yes, all of Long Island has been designated as a sole source aquifer region.

Ref. No. 24

4. **What is the depth from the lowest point of waste disposal/storage to the highest seasonal level of the saturated zone of the aquifer of concern?**

The depth to the septic system is unknown but is assumed to be 6 feet. The depth to groundwater is approximately 69 feet. Therefore, the distance between the lowest point of disposal and the highest seasonal level of the saturated zone is approximately 63 feet.

Ref. Nos. 17, 19, 20

5. What is the permeability value of the least permeable intervening stratum between the ground surface and the aquifer of concern?

The least permeable stratum between the ground surface and the aquifer of concern consists of Holocene sand and gravel. The permeability associated with the sand and gravel sediment is greater than 10^{-3} centimeters per second.

Ref. Nos. 19, 20

6. What is the net precipitation for the area?

Net precipitation for the site area is 15 inches.

Ref. No. 21

7. Identify uses of groundwater within 3 miles of the site (i.e., private drinking source, municipal source, commercial, industrial, irrigation, unusable).

Groundwater supplies are used for all water needs.

Ref. No. 19

8. What is the distance to and depth of the nearest well that is currently used for drinking or irrigation purposes?

The nearest drinking water well is located adjacent to, and west of, the LILCO property, but approximately 800 feet south of a potential waste source.

Distance 800 ft south

Depth 585 ft

Ref. Nos. 2, 6

9. Identify the population served by the aquifer of concern within a 3-mile radius of the site.

The population served by the aquifer of concern (Upper Glacial and Magothy) within a 3-mile radius from the site is approximately 155,100.

Ref. Nos. 23, 24

SURFACE WATER ROUTE

10. Describe the likelihood of a release of contaminant(s) to surface water as follows: observed, alleged, potential, or none. Identify the contaminant(s) detected or suspected, and provide a rationale for attributing the contaminants to the facility.

There is little or no potential for the site to release contaminants to surface water. The site is underlain by sand and gravel, which promote rapid infiltration of precipitation. Water that does not infiltrate would be directed to storm drains which enter the recharge basin adjacent to the site.

Ref. Nos. 3, 20

11. What is the facility slope in percent? (Facility slope is measured from the highest point of deposited hazardous waste to the most downhill point of the waste area or to where contamination is detected.)

The slope of the facility is very flat and estimated to be less than 1 percent using the appropriate U.S.G.S. topographic map

Ref. Nos. 25, 26

12. What is the slope of the intervening terrain in percent? (Intervening terrain slope is measured from the most downhill point of the waste area to the probable point of entry to surface water).

The slope of the intervening terrain is less than 1 percent. There are no surface waters within a 3-mile radius from the site that could realistically be impacted by the site. All surface water drainage is directed to the recharge basin adjacent to the site.

Ref. Nos. 20, 25, 26

13. What is the 1-year 24-hour rainfall?

The 1-year 24-hour rainfall for the site area is approximately 2.75 inches.

Ref. No. 21

14. What is the distance to the nearest downslope surface water? Measure the distance along a course that runoff can be expected to follow.

All surface water drainage is directed to the recharge basin located adjacent to the site; there are no natural downslope surface waters.

Ref. Nos. 20, 25

15. Identify uses of surface waters within 3 miles downstream of the site (i.e., drinking, irrigation, recreation, commercial, industrial, not used).

Not applicable; there are no surface waters within 3 miles of the site.

Ref. No. 26

16. Describe any wetlands, greater than 5 acres in area, within 2 miles downstream of the site. Include whether it is a freshwater or coastal wetland.

There are no wetlands within 2 miles of the site.

Ref. No. 26

17. Describe any critical habitats of federally listed endangered species within 2 miles of the site along the migration path.

There are no critical habitats of federally listed endangered species located within 2 miles of the site.

Ref. No. 18

18. What is the distance to the nearest sensitive environment along or contiguous to the migration path (if any exist within 2 miles)?

There are no sensitive environments along or contiguous to the 2-mile migration path from the site.

Ref. Nos. 18, 26

19. Identify the population served or acres of food crops irrigated by surface water intakes within 3 miles downstream of the site and the distance to the intake(s).

Not applicable; there are no surface waters that can provide drinking or irrigation water within 3 miles of the site.

Ref. No. 26

20. What is the state water quality classification of the water body of concern?

Not applicable; there are no surface waters that are of concern.

Ref. No. 26

21. Describe any apparent biota contamination that is attributable to the site.

There is no documentation that indicates biota contamination. The site is located in an urbanized area; wastes are confined to designated storage areas or to subsurface disposal areas. Therefore, the potential for the biota to be affected is very low.

Ref. Nos. 18, 25, 26

AIR ROUTE

22. Describe the likelihood of a release of contaminant(s) to the air as follows: observed, alleged, potential, none. Identify the contaminant(s) detected or suspected, and provide a rationale for attributing the contaminant(s) to the facility.

The potential for a release of contaminants to the air exists. LILCO stores a number of substances on site prior to disposal. Some of these substances, especially the solvent wastes (F001, F003, and F005), may be extremely volatile if accidentally spilled.

Ref. Nos. 5, 7, 8

23. What is the population within a 4-mile radius of the site?

The population within a 4-mile radius of the site is approximately 235, 000.

Ref. No. 23

FIRE AND EXPLOSION

24. Describe the potential for a fire or explosion to occur with respect to the hazardous substance(s) known or suspected to be present on site. Identify the hazardous substance(s) and the method of storage or containment associated with each.

The potential for a fire and/or explosion to occur on site exists. LILCO does store quantities of ignitable and corrosive waste (D001 and D002). All waste, however, is stored in drums or tanks in a RCRA-permitted area.

Ref. Nos. 5, 7, 8, 22

25. What is the population within a 2-mile radius of the hazardous substance(s) at the facility?

The population within 2 miles of the site is approximately 79,200.

Ref. No. 23

DIRECT CONTACT/ON-SITE EXPOSURE

- 26. Describe the potential for direct contact with hazardous substance(s) stored in any of the waste units on site or deposited in on-site soils. Identify the hazardous substance(s) and the accessibility of the waste unit.**

All areas that are or have been used to store or dispose of hazardous substances are either fenced with restricted access or confined to the subsurface soils. The potential for direct contact in these areas is low.

Ref. Nos. 7, 8

- 27. How many residents live on a property whose boundaries encompass any part of an area contaminated by the site?**

There are no residential areas on the site property.

Ref. Nos. 7, 25, 26

- 28. What is the population within a 1-mile radius of the site?**

The population within a 1-mile radius of the site is approximately 20, 300.

Ref. No. 23

PART IV: SITE SUMMARY AND RECOMMENDATIONS

The LILCO-Hicksville Operations Center is located at 175 East Old Country Road in Hicksville, Nassau County, New York. The site is an active operations facility which stores, maintains, tests, and calibrates equipment for the Long Island Lighting Company. The facility is situated in a commercially zoned area of Hicksville with residential areas less than 0.25 mile away. The facility occupies approximately 80 acres in the midst of a densely populated area; the population is approximately 20,300 within 1 mile of the site.

A function of the facility is to store hazardous waste prior to off-site disposal. LILCO obtained a RCRA Part A (treatment and storage of hazardous waste) permit so it could store the wastes from other LILCO facilities until a sufficient quantity is accumulated to reduce transportation and disposal costs. Substances typically stored on site include PCB waste, mercury waste, solvents, corrosives, and ignitables. LILCO also maintains a SPDES permit for the disposal of cooling tower blowdown waste. This waste is received by a New York State recharge basin located adjacent to the property. Up until 1983, LILCO also discharged sanitary and other waste through leach fields throughout the site property. Since 1983 these wastes have been received by the municipal sewerage system.

All hazardous substances present on site are secured in permitted waste management areas or confined within the soil of the former leach fields; therefore, the potential for direct contact is limited.

There are no cleanup or enforcement actions pending.

A recommendation of **NO FURTHER REMEDIAL ACTION PLANNED (NFRAP)** is assigned to the LILCO-Hicksville Operations Center. This recommendation is given because of the facility's current waste storage and handling practices and its history of permit compliance. However, the potential for soil and groundwater contamination to occur on site does exist. The site should therefore be monitored in the future as part of permit compliance inspections.

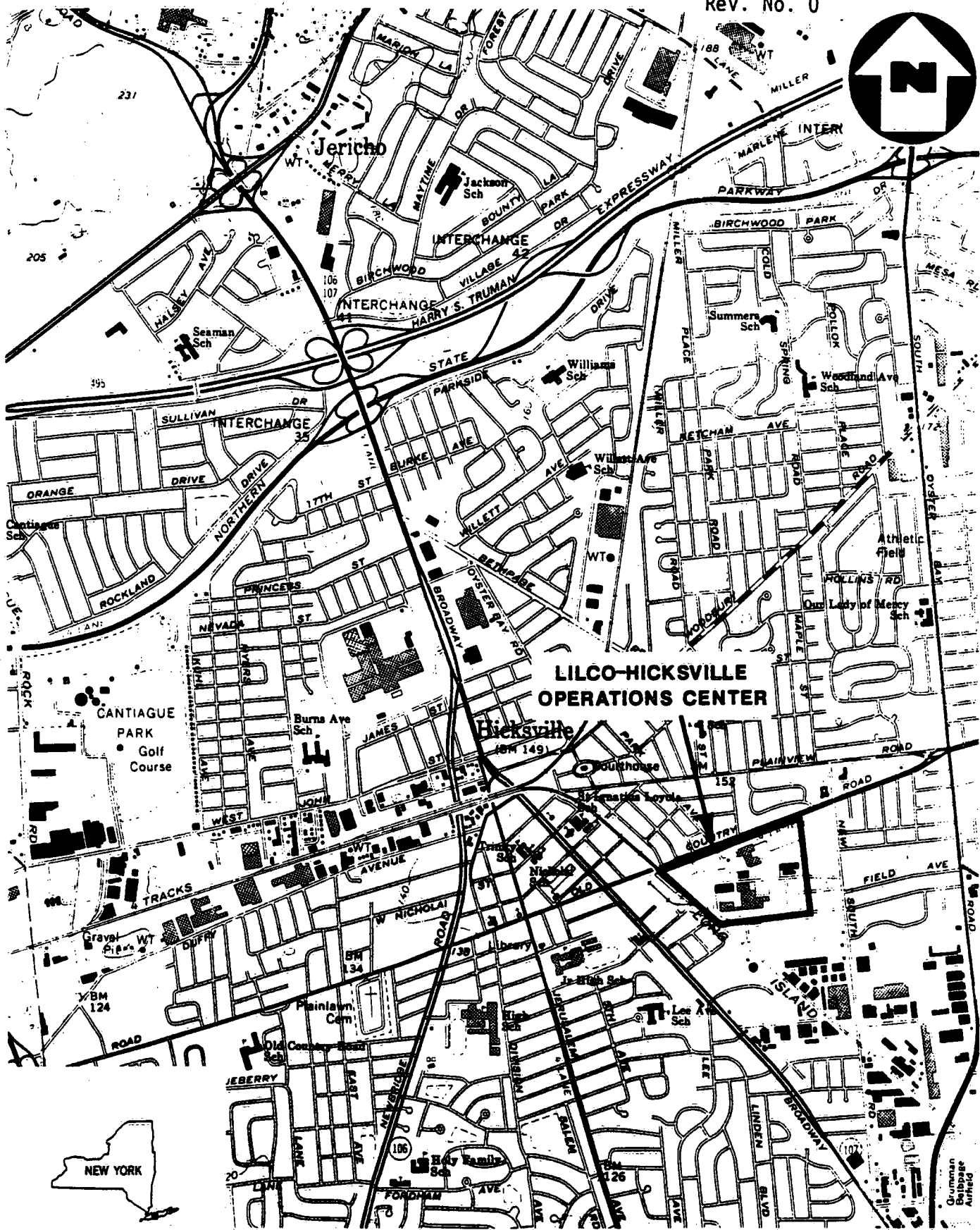
ATTACHMENT 1

MAPS AND PHOTOGRAPHS

**LILCO-Hicksville Operations Center
Hicksville, New York**

CONTENTS

- Figure 1: Site Location Map**
- Figure 2: Site Map**
- Exhibit A: Photograph Log**



(QUAD) HICKSVILLE, N.Y.

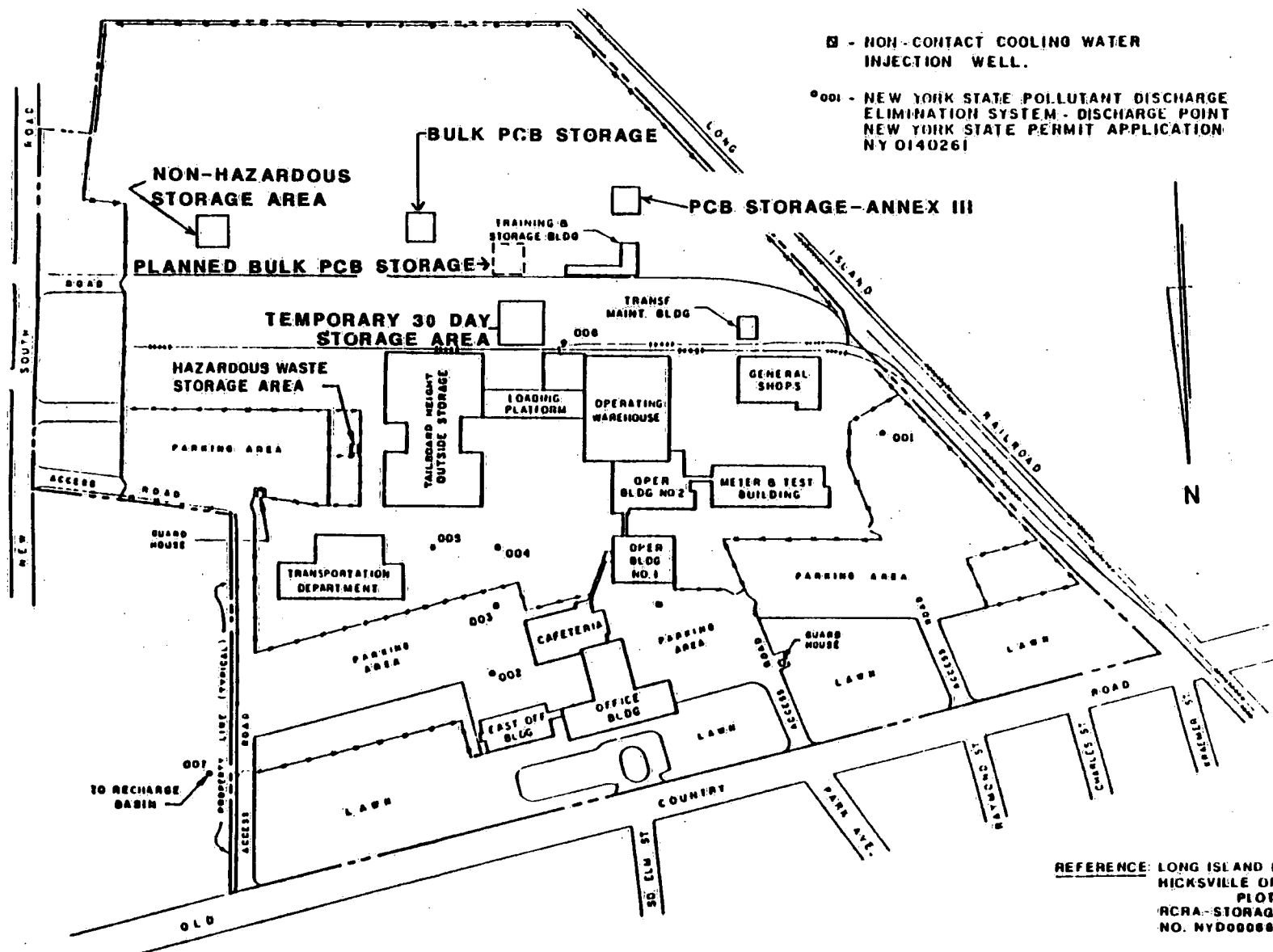
SITE LOCATION MAP

**LILCO-HICKSVILLE OPERATIONS CENTER,
HICKSVILLE, N.Y.**

SCALE: 1" = 2000'

FIGURE 1





SITE MAP
LILCO-HICKSVILLE OPERATIONS CENTER, HICKSVILLE, N.Y.

NOT TO SCALE

FIGURE 2



EXHIBIT A

PHOTOGRAPH LOG

LILCO - HICKSVILLE OPERATIONS CENTER
HICKSVILLE, NEW YORK

OFF-SITE RECONNAISSANCE: JANUARY 11, 1989

LILCO-HICKSVILLE OPERATIONS CENTER
HICKSVILLE, NEW YORK
JANUARY 11, 1989

PHOTOGRAPH INDEX

<u>Photo Number</u>	<u>Description</u>	<u>Time</u>
1P-15	Photo of the northeast entrance to the LILCO Operations Center.	1150
1P-16	Photo of the main entrance to the LILCO Operations Center.	1202

All Photographs taken by Peter von Schondorf.

LILCO OPERATIONS CENTER, HICKVILLE, NEW YORK



1P-15

January 10, 1989

1150

Photo of the northeast entrance to the LILCO Operations Center.



1P-16

January 10, 1989

1202

Photo of the main entrance to the LILCO Operations Center.

ATTACHMENT 2

REFERENCES

1. Letter from Madison N. Milhous, P.E., Environmental Engineering Department, Long Island Lighting Company, to Robert Willis, Nassau County Department of Health, April 20, 1988.
2. Letter from John J. McCrosson, Assistant Superintendent, Hicksville Water District, to Edward L. Leonard, NUS Corporation, March 22, 1988.
3. Notification of Availability for Review, State Pollutant Discharge Elimination System Permit, Permit No. 0140261 for LILCO-Hicksville Operations Center, September 9, 1987.
4. Letter from John A. Licata, P.E., NYSDEC, Regional Oil Spill Engineer, to Thomas McNamara, Long Island Lighting Company, August 6, 1987.
5. NYSDEC Industrial Chemical Survey for LILCO-Hicksville Operations Center. John A. Weismantle, LILCO Vice President of Engineering. April 22, 1987.
6. Letter from Madison N. Milhous, P.E., LILCO Environmental Engineering Department, to Robert Greene, NYSDEC, Regional Permit Administrator, April 1, 1987.
7. New York State Industrial Hazardous Waste Management Act, Inspection Form for LILCO-Hicksville Operations Center, conducted on February 27, 1987.
8. Nassau County Health Department site inspection of LILCO-Hicksville Operations Center, conducted on January 7, 1986.
9. Letter from Madison N. Milhous, P.E., LILCO Environmental Engineering Department, to Chris Demo, U.S. EPA Region 2, Permit Administration Branch, October 11, 1985.
10. Letter from Steven V. Dalton, LILCO Environmental Engineering Department, to Allen Geisendorfer, NYSDEC Industrial Inorganics Section, December 18, 1984.
11. Letter from Daniel J. Larkin, NYSDEC Regional Permit Administrator, to Raymond Driscoll, P.E., LILCO Environmental Engineering Department, June 4, 1984.
12. Letter from Raymond J. Driscoll, P.E., LILCO Environmental Engineering Department, to George K. Hansen, NYSDEC Bureau of Wastewater Facilities Operations, January 6, 1984.
13. Letter from Kenneth A. Yager, LILCO Environmental Engineering Department, to Allan Geisendorfer, NYSDEC Industrial Inorganics Section, November 19, 1982.
14. Letter from Raymond J. Driscoll, P.E., LILCO Environmental Engineering Department, to Albert Machlin, NYSDEC Regional Engineer, October 14, 1982.
15. NYSDEC, October 1, 1982, New York State Department of Environmental Conservation State Pollutant Discharge Elimination System Permit, Permit No. 0140261 for LILCO-Hicksville Operations Center.
16. Nassau County Health Department site inspections of LILCO-Hicksville Operations Center, conducted on March 17 and 18, 1980.
17. Application Form "D" for a State Pollutant Discharge Elimination System Permit for LILCO-Hicksville Operations Center, July 14, 1976.

18. New York State Department of Environmental Protection, Significant Habitat Overlay No. 1, "New York Quadrangle", March 1987.
19. Kilburn, C. and R.K. Krulikas. Hydrogeology and ground-water quality of the northern part of the Town of Oyster Bay, Nassau County, New York, in 1980. U.S. Geological Survey Water-Resources Investigations, Report 85-4051, 1987.
20. Franke, O.L. and N.E. McClymonds, Summary of the hydrologic situation on Long Island, New York, as a guide to water-management alternatives. U.S. Geological Survey Professional Paper 627-F, U.S. Government Printing Office, 1972.
21. Uncontrolled hazardous waste site ranking system, A user's manual, 40 CFR, Part 300, Appendix A, 1986.
22. Code of Federal Regulations, Title 40, Part 261, July 1985.
23. General Sciences Corporation, Graphical Exposure Modeling System (GEMS). Landover Maryland, 1986.
24. Federal Register, Volume 43, Section 26611, June 21, 1978, U.S. Government Printing Office.
25. Preliminary Assessment Off-Site Reconnaissance Information Reporting Form, LILCO-Hicksville Operations Center, TDD No. 02-8901-14, NUS Corp. Region 2 FIT, Edison, New Jersey, January 11, 1989.
26. Three-Mile Vicinity Map, based on U.S. Department of the Interior, Geological Survey Topographic Maps, 7.5 minute series, "Hicksville, NY, 1969, revised 1979; Amityville, NY, 1967, revised 1979; Freeport, NY, 1969, revised 1979; and Huntington, NY, 1969, revised 1979."

REFERENCE NO. 1



LONG ISLAND LIGHTING COMPANY

175 EAST OLD COUNTRY ROAD • HICKSVILLE, NEW YORK 11801

Direct Dial Number

April 20, 1988

Mr. Robert Willis
Nassau County Department of Health
240 Old Country Road
Mineola, NY 11501

Hicksville SPDES Permit Renewal - #NY0140261

Dear Mr. Willis:

Attached is the results of the sampling of the annual cooling tower drainout (Outfall 007) at the Hicksville Operations Center. Unfortunately, the sampling volume was insufficient to do a more complete analysis.

This drain out is a once-a-year occurrence; we will resample if so requested, this coming fall. The results of the available analyses are summarized below:

Total Suspended Solids	5.9 mg/l	
pH	7.62 S.U.	
Methylene Chloride	2 ug/l	* values are less than - see attached lab sheet
Benzene	1 ug/l	
Toluene	2 ug/l	
Xylene	6 ug/l	
1, 1, 1 Trichloroethane	1 ug/l	

We believe this completes the application for renewal, submitted May 21, 1987 and we hope you will expedite issuance of the permit.

If there are any questions regarding this matter, please contact Mr. Thomas McNamara of my staff at (516) 420-6142.

Sincerely,

Madison N. Milhous

Madison N. Milhous, P.E.
Manager, Environmental Engineer Department

cc: Ms. Katy Murphy - NYSDEC

* Conversation w/S. Dalton 4/27/88
* Conv. w/Tom Campbell 6/27/88 will resume letter w/k indication

Samples from: Hicksville Cooling Tower

SPDES ANALYTICAL REPORT

System Laboratories
Environmental Engineering
Glenwood Gas Plant

NOV 20 1987

Lab ID	Sample Date	SPDES No.	Source or Type	NITROGEN														Tech Date
				Cu ng/L	Fe ng/L	V ng/L	Ni ng/L	Zn ng/L	Cr ng/L	Mn ng/L	TSS ng/L	O&G ng/L	Cr+6 ng/L	Sb ng/L	Pb ng/L	As ng/L	Tot. NH3 ng/L	
N1935	10/30/87	HXCT1	NA								5.9				7.62			PS
N1936 10/30/87 HXCT2 NA				Methylene Chloride ug/l							1,1,1 Tri-chloroethane ug/l							
				<2							<1							
				Benzene ug/l			Toluene ug/l			Xylene ug/l								
				<1			<2			<6								

DISTRIBUTION:

Environmental Engineering - Melville
Supervisor Chemical Controls
Control Engineer
Lab Files

Signature: _____

Kenneth A. Yager
Supervisor Laboratory Services

REFERENCE NO. 2

HICKSVILLE WATER DISTRICT

4 DEAN STREET
HICKSVILLE, N. Y. 11802

PHONE
(516) 931-0184

March 22, 1988

NUS Corporation
1090 King Georges Post Road
Suite 1103
Edison, New Jersey

Att: Mr. E.L. Leonard

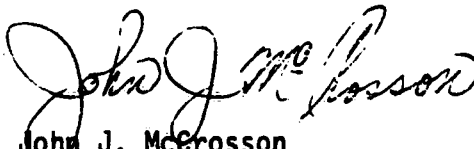
Dear Mr. Leonard:

Enclosing please find the list you requested containing well numbers, depth and aquifers used by the nineteen (19) wells operated by the Hicksville Water District.

If I may be of any further assistance please feel free to contact me at the above number.

Very truly yours,

HICKSVILLE WATER DISTRICT


John J. McCrosson
Assistant Superintendent

Enc

JJM/jps

HICKSVILLE WATER DISTRICT

4 DEAN STREET

HICKSVILLE, N. Y. 11802

PHONE
(516) 931-0184

March 22, 1988

<u>H.W.D. WELL #</u>	<u>COUNTY WELL #</u>	<u>DEPTH</u>	<u>AQUIFER</u>
1-4	N-7562	545 feet	Magthoy
1-5	N-8249	495 feet	Magthoy
1-6	N-9488	583 feet	Magthoy
2-2	N-5336	545 feet	Magthoy
3-2	N-8525	505 feet	Magthoy
4-2	N-8526	601 feet	Magthoy
5-2	N-7561	551 feet	Magthoy
5-3	N-9212	610 feet	Magthoy
6-1	N-3953	419 feet	Magthoy
6-2	N-3878	428 feet	Magthoy
7-1	N-6190	605 feet	Magthoy
7-2	N-6191	555 feet	Magthoy
8-1	N-6192	632 feet	Magthoy
8-2	N-6193	472 feet	Magthoy
8-3	N-9180	637 feet	Magthoy
well closest to site area [9-1	N-8778	590 feet	Magthoy
9-2	N-8779	585 feet	Magthoy
9-3	N-10208	600 feet	Magthoy
10-1	N-9463	625 feet	Magthoy

**11-1

Under construction will not be in operation
until early 1989.

REFERENCE NO. 3



NOTIFICATION OF AVAILABILITY FOR REVIEW

INITIATING UNIT: DRA CONTACT: Patty Murphy
ADDRESS: _____ DATE ISSUED: 9-9-87
OTHER # _____ DATE DUE: 10-9-87
OTHER # SPDES NY-0140261 DEC # 10-87-0729
PURPOSE FOR NOTIFICATION/REVIEW AUTHORITY: Additional information submitted by applicant - Please draft permit renewal + advise me as to decision on but fall #001 deletion request
APPLICANT: Lilco - Hicksville Operating Center

PROJECT NAME/DESCRIPTION: Renewal - cooling water for a/c + tower drawout discharge to gw

PROJECT LOCATION: Old Country Rd
City/Village: Hicksville Town: Hempstead
County: Nassau USGS Quad: _____

(Attach a location map.)

REMARKS: Original package submitted 5-21-87. Tax Map info:
Section: 3.0 Block: A Subblock: 46 Lots: 13, 242, 243, 247

DISTRIBUTION: Ted Sanford
Stan Juczek

☐ Complete ☐ Issue Permit ☐ Comments Attached ☐ Permit Conditions Attached

Inspected on _____ ☐ Deny Reason(s) _____

RESPONDING UNIT: _____

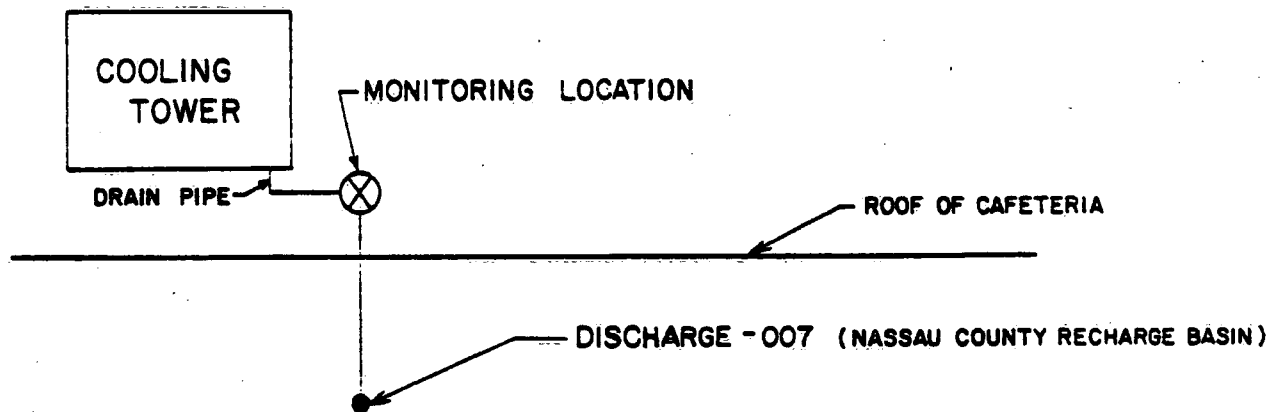
BY: _____

(name/unit/date)

MONITORING LOCATIONS

Permittee shall take samples and measurements to meet the monitoring requirements at the locations indicated below (locate and label nearest cross streets; facility entrance, significant structures, treatment process units, outfalls and monitoring locations at an appropriate scale, with North arrow and scale indicated. Use additional 8½" x 11" pages with match lines, as may be required. This information should be presented in a manner such that an individual unfamiliar with the facility can readily identify significant structures and wastewater treatment process units, and locate monitoring locations without an escort).

- 001 - This outfall is a diffusion well located approximately 80 feet west of the cafeteria. (See attached plot plan).
- 007 - This cooling tower is located on the roof of the cafeteria. The monitoring point is at the drain pipe located on the southside of the cooling tower. The final discharge point is at the Nassau County Recharge Basin. Please refer to attached plot plan which shows the location of the cooling tower and outfall. Below is a schematic which depicts the sampling location in relation to the cooling tower and discharge pipe.

MONITORING LOCATION DESCRIPTION - 007

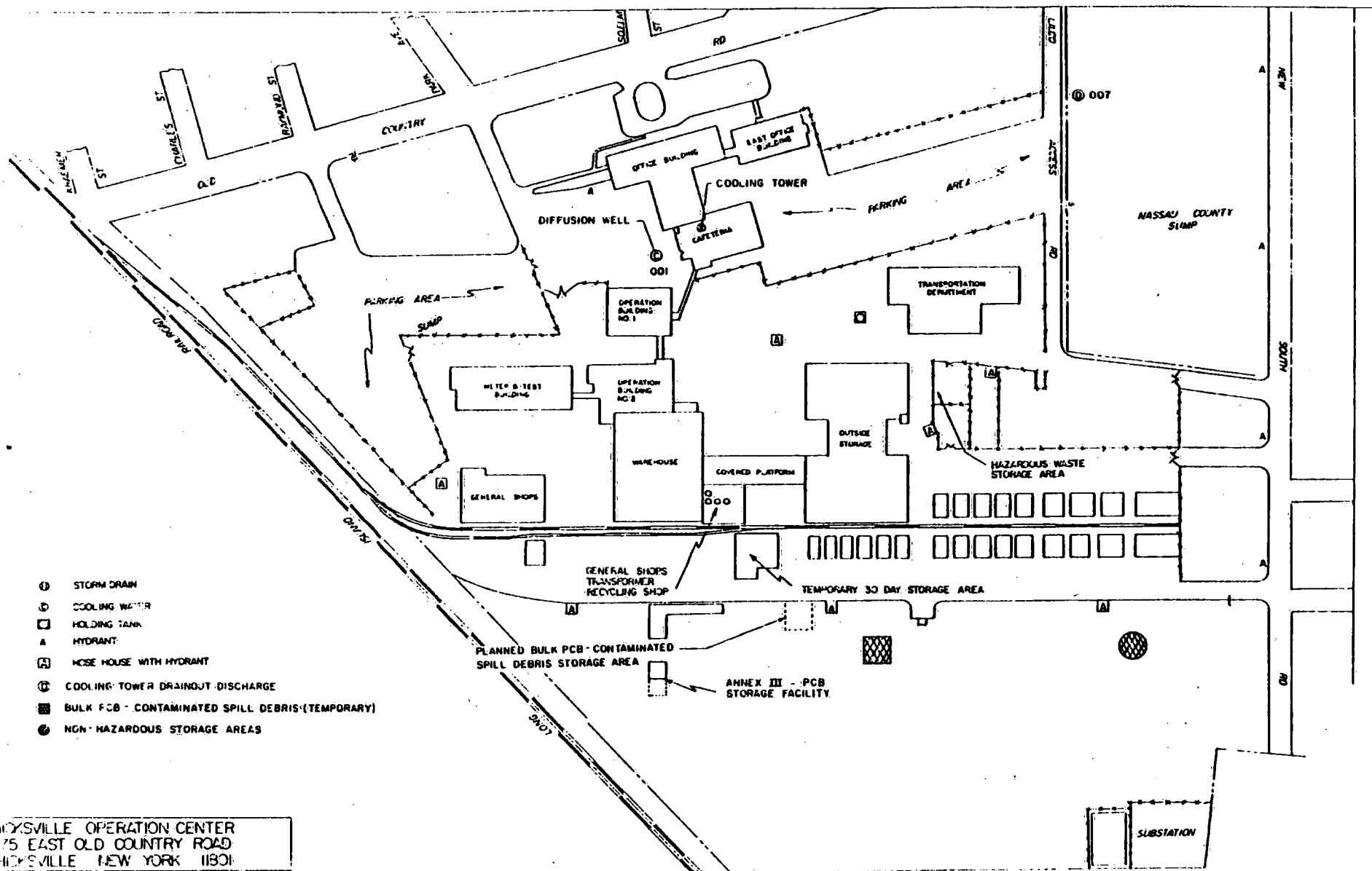
Effluent: Cooling Tower Drainout

Flow: 200 Gallons/Year

- ① STORM DRAIN
- ② COOLING WATER
- HOLDING TANK
- A HYDRANT
- [A] HOSE HOUSE WITH HYDRANT
- ③ COOLING TOWER DRAINOUT DISCHARGE
- BULK PCB - CONTAMINATED SPILL DEBRIS (TEMPORARY)
- NGH - HAZARDOUS STORAGE AREAS

HICKSVILLE OPERATION CENTER
175 EAST OLD COUNTRY ROAD
HICKSVILLE NEW YORK 11801

STATE PERMIT APPLICATION NO. NY-040261
DATE 12/6/80 PROX. SCALE 1"=200' DWN. MEO



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
Thermal Discharge And Material
Storage Area Supplement For
Application Form C

(Attach to Application Form)

1. Thermal Discharges

Does the temperature of any of the discharges from this facility exceed
70°F. at any time? ☐ YES ☒ NO

If yes, attach the following information, and specify which outfall(s) it relates
to:

- a) Range of measured discharge temperatures
- b) Maximum discharge temperature
- c) Discharge configuration (that is, whether surface, subsurface, effluent
diffuser, etc.)
- d) Chemical additives utilized (also see Section 4 on Form C)

2. Material Storage Areas

Is storm runoff or leachate from any material storage area (such as: coal
piles, raw material or finished product stockpiles, etc.) discharged to either
surface waters or groundwaters? ☒ YES ☐ NO Please refer to Attachments 1

If "yes", please attach a brief description of types and quantities of
materials stored, size of storage area, etc., and show its location and the
location of any discharge points on the map required by Section 6 of Form C.

Attachment 1

Description of Material Storage Areas
at the Hicksville Operations Center

There are several storage areas of non-hazardous materials which consist of a variety of waste or recyclable materials. This would include soil and rock materials from equipment (e.g., utility poles) installation or removal, equipment removed from service for disposal or scrap metal recycling, chipped vegetation from tree trimming and other non-hazardous materials resulting from repair and service of electrical distribution support activities. Please refer to Attachment 2 which shows the location of these storage areas at the facility.

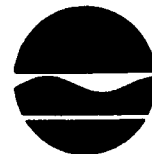
Also, LILCO is presently in the final design stages of a bulk solids storage facility for the storage of PCB contaminated spill debris. This material is primarily soil and grass removed from spill locations where the source of the spill was greater than 50 ppm PCB. The facility will consist of an eight (8) inch thick, sealed concrete pad with the dimensions 31 by 23 feet. It will be fenced in, and will be equipped with a loading ramp approximately 15 feet long. A 20 cubic yard roll-off container will be used for storage of the soil and debris and it will be covered with a tarpaulin to prevent rainwater infiltration. When a full load is collected, the waste in the roll-off container will be removed by a contractor to a permitted TSD facility. At present bulk material is temporarily stored on reinforced plastic and covered. The material is loaded with a backhoe into tractor trailers for removal by a contractor to a permitted TSD facility. Please refer to Attachment 2 which shows the location of these storage areas at the facility.

REFERENCE NO. 4

New York State Department of Environmental Conservation

Bldg. 40, SUNY, Stony Brook, NY 11794

(516) 751-7900 or (516) 751-7725



Thomas C. Jorling
Commissioner

August 6, 1987

CERTIFIED - RETURN RECEIPT REQUESTED

Mr. Thomas McNamara
Long Island Lighting Company
175 Old Country Road
Hicksville, NY 11801

Re: Spill No. 87-3663
Hicksville Operations Center

Dear Mr. McNamara:

This office has been informed by Tyree Brothers Environmental Services that one 10,000 gallon underground number 2 fuel oil tank failed a Petrotite systems test. In accordance with Article 12 of the New York State Navigation Law, I must determine if there has been any harm to the groundwaters of the State. In order for me to make this determination, you have three options:

1. Prove that it was not a leaking tank by removing all the piping from the tank and separately Petrotite test the tank. If the tank passes the Petrotite test, it is a piping leak. The tank may then be abandoned or the piping can be repaired, attached to the tank, and the system Petrotite tested.
2. Excavate and remove the tank in the presence of a representative from this office so that an inspection of the tank and the soil can be made. If the tank is sound, and there is no evidence of product loss, nothing further need be done. If there is a problem, proceed as in 3 below.
3. Abandon the tank in-place and install several four(4) inch diameter PVC site wells extending ten(10) feet into the groundwater with a screen length of twenty(20) feet, with slot size of .020 inches. The exact location and number of wells will be determined by a representative from this office. These wells will be checked for a period of twelve months by New York State, and if there is no evidence of product for that period, the spill will be removed from our listing. If product appears, recovery must begin immediately.

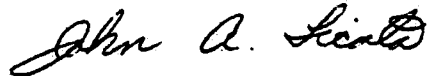
RECEIVED

AUG 10 1987

N.C.D.H. - BWPC

Please call Chris O'Neill or myself at 751-7900 or 751-7725 and let me know which option you will select to resolve this problem. If no response is received from you by August 26, 1987, this office will proceed with the installation of site wells and will seek reimbursement from you in accordance with Article 12 of the New York State Navigation Law.

Very truly yours,



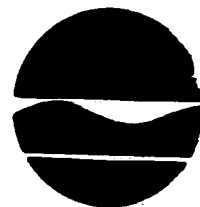
John A. Licata, P.E.
Regional Oil Spill Engineer

JAL:pn

CC: D. Bartow, NCFM
S. Silvers, NCHD

REFERENCE NO. 5

New York State Department of Environmental Conservation

Henry G. Williams
Commissioner

N Y S D E C

State Pollutant Discharge Elimination System (SPDES)

Industrial Chemical Survey

The Industrial Chemical Survey (ICS) was initially sent to many industries in a mass mailing in 1976 and 1977. The ICS form has since been made a part of the SPDES renewal application to obtain from all industries an update of information for use in preparation of your SPDES permit.

Attached is the Industrial Chemical Survey Form, including the list of Substances of Concern. You are asked to review the list carefully. Note that there are broad classes of compounds and that the list used in the original and subsequent mailings has been expanded to include metals. It should also be noted that virtually all water treatment chemicals and additives are substances of concern and should be reported on Part III, and indicated as a water treatment chemical under Purpose or Use.

If the information on your most recently submitted Survey adequately reflects the attached survey, alternatively you may complete the statement below and return this page with your SPDES application.

Note: The period for which information is requested is the past five years, not "since January 1, 1971" as stated on Part III, line 1 of the questionnaire.

We hereby state that our previous Industrial Chemical Survey, referenced below, adequately reflects current usage of the list of Substances of Concern received with this application.

Not Applicable. See Attachment B For Updated List

Signature _____ Date _____

Name _____ Title _____

Date of Previous Survey _____

TABLE I - SUBSTANCES OF CONCERN

CLASS A - HALOGENATED HYDROCARBONS

A01. Methyl chloride
A02. Methylene chloride
A03. Chloroform
A04. Carbon tetrachloride
A05. Freon/Genatron
A06. Other halomethanes
A07. 1, 1, 1-Trichlorethane
A08. Other haloethanes
A09. Vinyl fluoride
A10. Vinyl chloride
A11. Dichloroethylene
A12. Trichloroethylene
A13. Tetrachloroethylene
A14. Chlorinated propane
A15. Chlorinated propene
A16. Hexachlorobutadiene
A17. Hexachlorocyclopentadiene
A18. Chlorinated benzene
A19. Chlorinated toluene
A20. Fluorinated toluene
A21. Polychlorinated biphenyl (PCB) /
A22. Chlorinated naphthalene
A23. Dechlorane ($C_{10}Cl_{12}$)
A24. Hexachlorocyclohexane (BHC)

A99. Halogenated hydrocarbons not specified above

CLASS D - AROMATIC HYDROCARBONS

D01. Benzene
D02. Toluene
D03. Xylene
D04. Biphenyl
D05. Naphthalene
D06. Ethylbenzene
D07. Styrene
D08. Acenaphthene
D09. Fluoranthene

D99. Aromatic hydrocarbons not specified above

CLASS E - TARS

E01. Coal tar
E02. Petroleum tar

E99. Tars not specified above

CLASS B - HALOGENATED ORGANICS (other than hydrocarbons)

B01. Phosgene
B02. Methyl chloromethyl ether
B03. bis-chloromethyl ether
B04. Other chloroalkyl ethers
B05. Benzoyl chloride
B06. Chlorothymol
B07. Chlorinated phenol
B08. Chlorinated cresols or xylenols
B09. Chlorendic acid
B10. Chloroaryl ethers
B11. Dichlorophene or hexachlorophene
B12. Chlorinated aniline (including methylene bis (2-chloroaniline))
B13. Dichlorobenzidine
B14. Chlorinated diphenyl oxide
B15. Chlorinated toluidine
B16. Kepone ($C_{10}Cl_{10}O$)
B17. Dichlorovinyl sulfonyl pyridine
B18. Chloropicrin
B19. Trichloromethyl thio-phthalimide
B20. Trichloro-propylsulfonyl pyridine
B21. Tetrachloro-methylsulfonyl pyridine
B22. Tetrachloro-isophthalonitrile
B99. Halogenated organics not specified above

CLASS F - SUBSTITUTED AROMATICS (other than hydrocarbons and non-halogenated)

F01. Phenol, cresol, or xylene
F02. Catechol, resorcinol, or hydroquinone
F03. Nitrophenols
F04. Nitrobenzenes
F05. Nitrotoluenes
F06. Aniline
F07. Toluidines
F08. Nitroanilines
F09. Nitroanisole
F10. Toluene diisocyanate
F11. Dimethylaminoazobenzene
F12. Benzoic Acid (and Benzoate salts)
F13. Phthalic, isophthalic or terephthalic acid
F14. Phthalic anhydride
F15. Phthalate esters
F16. Phenoxycetic acid
F17. Phenylphenols
F18. Nitrobiphenyls
F19. Aminobiphenyls (including benzidine)
F20. Diphenylhydrazine
F21. Naphthylamines
F22. Carbazole
F23. Acetylaminofluorene
F24. Dyes and organic pigments
F25. Pyridine

F99. Substituted aromatics not specified above

CLASS C - PESTICIDES (includes herbicides, algacides, biocides, acaricides and miticides)

C01. Aldrin/Dieldrin
C02. Chlordane and metabolites
C03. DDT and metabolites
C04. Endosulfan/Thiodan and metabolites
C05. Endrin and metabolites
C06. Heptachlor and metabolites
C07. Malathion
C08. Methoxychlor
C09. Parathion
C10. Toxaphene
C11. Sevin
C12. Kelthane
C13. Diazinon
C14. Dithane
C15. Carbaryl
C16. Silver
C17. Dithiocarbamates
C18. Maneb
C19. Dioxathion
C20. Tandex/Marbutilate
C21. Carbofurans
C22. Pentac
C23. Folpet
C24. Dichloro
C25. Rotenone
C26. Lindane/Isotox
C27. Simazine
C28. Methoprene

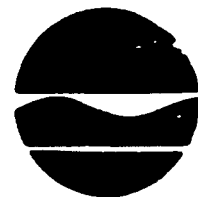
C99. Pesticides not specified above

CLASS G - MISCELLANEOUS

G01. Asbestos
G02. Acrolein
G03. Acrylonitrile
G04. Isophorone
G05. Nitrosamines
G06. Ethylenimine
G07. Propiolactone
G08. Nitrosodimethylamine
G09. Dimethyl hydrazine
G10. Maleic anhydride
G11. Methyl isocyanate
G12. Epoxides
G13. Nitrofurans
G14. Cyanide

CLASS M - METALS AND THEIR COMPOUNDS

M01. Antimony
M02. Arsenic
M03. Beryllium
M04. Cadmium
M05. Chromium
M06. Copper
M07. Lead
M08. Mercury
M09. Nickel
M10. Selenium
M11. Silver
M12. Thallium
M13. Zinc
M99. Metals not specified above



INDUSTRIAL CHEMICAL SURVEY

PART I.

Please refer to
attached table 1

PLEASE COMPLETE AND RETURN TO THE ABOVE ADDRESS, ATTENTION: INDUSTRIAL CHEMICAL SURVEY.

COMPANY NAME Long Island Lighting Company		SIC CODE (If known) 4911	OFFICE USE ONLY
COMPANY MAILING ADDRESS 175 East Old Country Road	CITY Hicksville	STATE New York	ZIP CODE 11801
PLANT NAME (If different) Hicksville Operating Center	CONTACT NAME Madison N. Milhous, P.E.	TELEPHONE Area (516) 420-6140	
PLANT ADDRESS (If different) Street	CITY	STATE	ZIP CODE

PRINCIPAL BUSINESS OF PLANT

Operating Center (Equipment Storage & Maintenance)

NOTE: (If parent company, give name and addresses of all divisions, subsidiaries, etc. located in New York State. A separate questionnaire is to be completed and submitted for each.)

PART II
Discharge Information

WATER	1. Does your plant discharge liquid wastes to a municipally owned sanitary sewer system? Name of System <u>Nassau County Sewer System</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	2. Is your facility permitted to discharge liquid wastes under a State (SPDES) or Federal (NPDES) permit? Permit Number <u>0026344</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	3. Do you discharge liquid wastes in any other manner? Explain _____	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	If any of the above are "Yes": a. Do you discharge process or chemical wastes — (i.e. water used in manufacturing including direct contact cooling water and scrubber water)? b. Do you discharge non-contact cooling water? c. Do you discharge collected storm drainage only? d. Do you discharge sanitary wastes only?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
AIR	1. Does your facility have sources of possible emissions to the atmosphere?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	2. Enter Location and Facility Code as shown on your Air Pollution Control Application for Permits and Certification (If applicable) <u>2824003108</u>	
SOLID & CONCENTRATED LIQUID WASTES	1. List Name and Address of Firm (Including yourself) removing wastes other than office and cafeteria refuse. Name <u>See Attachment A</u> Address _____ City _____ State _____ Zip Code _____ Name _____ Address _____ City _____ State _____ Zip Code _____	
	2. List Location(s) of Landfill(s) owned and used by your facility. 1 <u>None</u> 2 _____	Active <input type="checkbox"/> Inactive <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
PESTICIDES	1. Does this facility: Manufacture Pesticides or Pesticide Product Ingredients? Produce Pesticides or Pesticide Product Ingredients? Formulate Pesticides? Repackage Pesticides?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	2. EPA Establishment Number <u> </u> - <u> </u> - <u> </u>	

PART III

SUBSTANCES OF CONCERN
(Refer to attached TABLE I)

Complete all information for those substances your facility has used, produced, stored, distributed or otherwise disposed of since January 1, 1971. Do not include chemicals used only in analytical laboratory work. Enter the name and code from Table I. If facility uses a substance in any of the Classes A - F which is not specified in the list, enter it as code class plus 99, e.g. 999 with name, usage, etc.

NAME OF SUBSTANCE	CODE	AVERAGE ANNUAL USAGE	AMOUNT NOW ON HAND	(✓)		PURPOSE OF USE (State whether produced, reacted, blended, packaged, distributed, no longer used, etc.)
				GAL.	LB.	
111 Trichloroethane	A07	1000	500	x		Various Field Uses
Stoddard Solvent	F99	110	110	x		Cleaner, Degreaser
Waste						
Mercury, Metallic	D009	110	varies	x		
Mercury Washwater	D009	275	"	x		
Mercury Contaminated Regulators	D009	5500	"	x		
Acid Waste	D002	440	"	x		
Halogenated Solvents	F001/	825	"	x		
	F002					
Non-Halogenated Solvents	F003/	385	"	x		
	F005		"	x		
Paint Related Material	D001	660	"	x		
PCB Related Wastes						
a. Oil, 50 to 500 ppm	B002	60,000	"	x		
b. Oil, 50 to 500 ppm	B002	40,000	"	x		
c. Oil, greater than 500 ppm	B003	20,000	"	x		
d. Contaminated Soil Debris	B007	8,800	"	x		
e. Capacitors	B005	3,000 units				
f. Transformers greater than 500 rpm	B006	13 units				
g. Bulk PCB Solids	B007	50-150 Cu Yd	"	x		
h. Natural Gas Condensate with greater than 50 ppm PCB	D001	1650	"	x		

RECEIVED

APR 23 1987

NCDH-BLRM

If you use chemicals of unknown composition, list trade name or other identification, name of supplier and complete information.

NAME OF SUBSTANCE	AVERAGE ANNUAL USAGE	AMOUNT NOW ON HAND	(✓)		SUPPLIER	PURPOSE OF USE (State whether produced, reacted, blended, packaged, distributed, no longer used, etc.)
			GAL.	LB.		
See Attachment B for a List of Chemicals						

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

SIGNATURE (Owner, Partner, or Officer)

DATE

NAME (Printed or Typed)

TITLE

John A. Weismantle

V.P. Engineering

REFERENCE NO. 6



LONG ISLAND LIGHTING COMPANY

175 EAST OLD COUNTRY ROAD • HICKSVILLE, NEW YORK 11801

Direct Dial Number

April 1, 1987

Mr. Robert Greene
Regional Permit Administrator
New York State Department of
Environmental Conservation
Region I - SUNY Building 40
Stony Brook, New York 11790

Hicksville Operation Center
SPDES Permit Renewal - Permit No. NYC140261

Dear Mr. Greene:

Enclosed please find a completed application package for the renewal of the Hicksville Operation Center's SPDES permit. This application includes the following:

1. A completed Application Form 1 - General Information (EPA Form 3510-1) and a USGS Map.
2. A list of all public water purveyors with a service area or a portion thereof located within a three mile radius of the Power Station.
3. A completed New York State Industrial Chemical Survey Form.
4. Application Form 2C (EPA Form 3510-2C), and a site drawing showing the two outfalls.

Pursuant to a recent discussion between Thomas Campbell of my staff and Mr. Gerald Robin, of the Water Quality Section of the DEC-Region I we are submitting Application Form 2C minus the priority pollutant data which we are unable to obtain at this time. Such data can only be obtained in the fall for discharge 007 (Cooling Tower Drainout) when the Cooling Tower's contents are drained in preparation for winter storage and during the summer for discharge 001 (Once Through Cooling Water) when cooling water usage for air conditioning in the main office building is utilized. We will submit the priority pollutant data to the DEC in the fall of 1987 when samples from both discharges can be obtained.

In addition, we wish to bring to your attention that discharge 001 receives once through cooling water derived from an on-site well. The water is used to cool air conditioning equipment in the main office building and is returned to the ground through diffusion well No. N-8100D (see attached permit). Since this water is not chemically treated and is discharged to a well which is registered with the Division of Water Resources of the NYSDEC, we request that discharge 001 be removed from the SPDES permit.

Finally, the required application fee of \$300 is being processed and will be submitted in a separate cover letter shortly.

If you have any questions or require any additional information, please contact Mr. Thomas J. Campbell of my staff at (516) 420-6138.

Very truly yours,

Madison N. Milhous

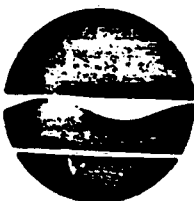
Madison N. Milhous, P.E.
Manager
Environmental Engineering Department

TJC/mac

cc: Messrs. P. Barbato (NYSDEC - Region I)
S. Juczak (NCHD)

REFERENCE NO. 7

47-15-14(9/86)



APR 14 1987

INSPECTION FORM

REGION: I
Major: /
Major TSDF: /
Non-Major: /
Substitution: /

NEW YORK STATE INDUSTRIAL HAZARDOUS WASTE MANAGEMENT ACT Chapter 639, Laws of 1978

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Henry G. Williams, Commissioner

Division of Solid and Hazardous Waste
Norman H. Nosenchuck, Director

Send to: Compliance Inspection Section
50 Wolf Road - Room 209/415
Albany, New York 12233-0001

EPA I.D. NUMBER: NY D006866008

*HANDLER'S NAME (Corporate): LILCO/Hicksville Operating Center
(Division):

*HANDLER'S MAILING ADDRESS: 175 E. Old Country Road

City, State & Zip Code

*HANDLER'S LOCATION ADDRESS: Hicksville, New York 11801
(if different than mailing)

City, State & Zip Code

*HANDLER'S TELEPHONE NUMBER: (516) 733-4137 Extension:

*FULL NAME OF HANDLER'S CONTACT: (Mr.) (Ms.) Steven Dalton

*SIGNATURE OF HANDLER'S CONTACT:

(This signature is not an admittance to any violations cited herein. It merely acknowledges that an inspection took place.)

*TITLE OF HANDLER'S CONTACT: Manager

INSPECTION DATE: 2/27/87 TIME OF INSPECTION: 10:00 (a.m.) (p.m.)

INSPECTOR'S SIGNATURE: Margaret Emile

COUNTY: Nassau E/A NUMBER: _____

INSPECTOR'S NAME: Agnes Gava

TITLE: NYSDEC Inspector

NAME: Margaret Emile

TITLE: Environmental Engineer

CHECK ONE: Copy of THIS report (has) (has not) been given to the Handler.

REPORT PREPARED BY: Margaret Emile DATE: 3/2/87

REPORT APPROVED BY: S. S. S. DATE: 3/2/87

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* For the purpose of this Inspection Report - HANDLER means a hazardous waste Generator, Transporter, Treatment, Storage or Disposal Facility (TSDF).

New York State Department of Environmental Conservation
Division of Solid and Hazardous Waste
50 Wolf Road, Albany, New York 12233

PART I

General Information and Classification of Facility

1. Identification of Hazardous Waste - 371

Yes No

A. Is there reason to believe the facility has hazardous waste on-site? If yes, what leads you to believe it is hazardous waste? Check appropriate box/boxes and attach any applicable correspondence with DEC or EPA:

X _____

(1) X Company recognizes that its waste is hazardous during the inspection.

(2) X Company admitted the waste is hazardous in its RCRA notification and/or Part A permit application.

(3) X Testing has shown characteristics of:
(X) ignitability - 371.3(b);
(X) corrosivity - 371.3(c);
(X) reactivity - 371.3(d);
(X) EP toxicity - 371.3(e)

_____ Has revealed hazardous constituents (please attach analysis report) 371.4(a)(2), Appendix 22, Appendix 23

(4) _____ The material is listed in the regulations as a hazardous waste from non-specific sources 371.4(b).

(5) _____ The waste material is listed in the regulations as a hazardous waste from specific sources. 371.4(c).

(6) _____ The material or product is listed in the regulations as discarded commercial chemical products, off-specification species, container residues and spill residues thereof. 371.4(d).

(7) _____ Company is unsure, but they have reason to believe that waste materials are hazardous. (Explain) _____

B. Is there reason, other than those above, for you to believe that there is hazardous waste on site? (Explain) _____

C. What other environmental permits are held by the company, relative to hazardous waste management?

☒ SPDES Permit Number

☒ Air Permit Number

____ Part 364 Industrial Waste Transporter Permit (indicate this company's permit number if any)

Please describe other relevant (if any) permits and give the name, address, Part 364 Permit Number and EPA I.D. Number of transporter(s) used by company.

D. If the facility is a treatment, storage or disposal facility, have they:

☒ Submitted a Part A application. ____ Have changes been made that are not reflected in the Part A application? Should the Part A be modified by the Company? ____ If so, explain.

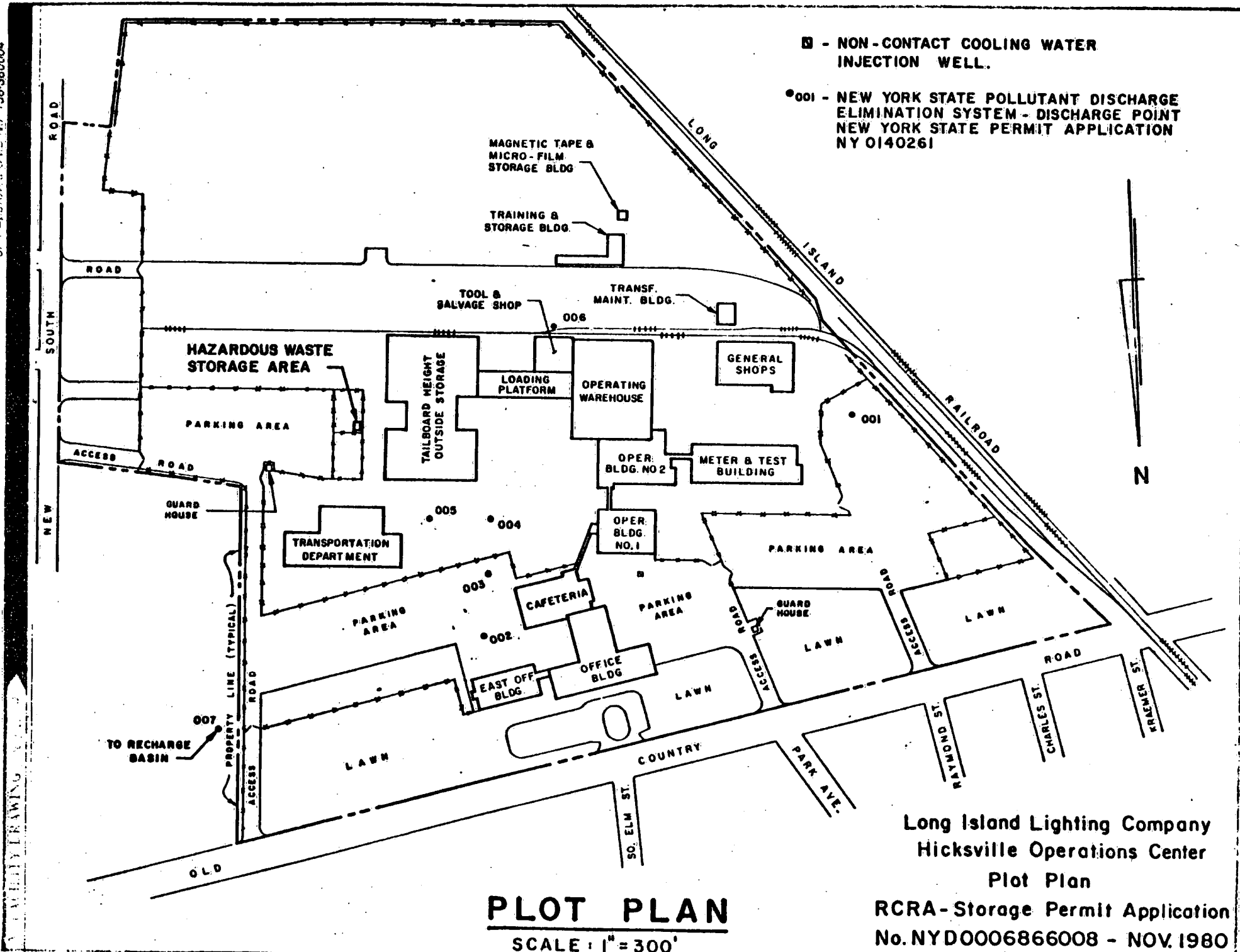
____ Submitted a Part B application.

____ Been granted a Part 373 permit.

If so, when does it expire: _____

Please attach or explain any special conditions or variances - 373-1.1(e)

State has called in their
Part 373 permit.



____ Been granted a hazardous waste Part B permit.

If so, also complete Appendix M.

- E. Describe the activities that result in the generation of hazardous waste. Include the company's manufacturing processes. _____

Facility is involved in the generation and distribution of gas and electricity. The facility generates PCB contaminated waste and Hazardous wastes which are shipped off site for disposal.

- F. Identify the hazardous wastes that are on-site and the quantity of each (use the identification numbers referred to in Part 371). _____

3-55 gal. of D001
20-55 gal. of F001 or F002
9-55 gal. of Acids
29-55 gal. of Mercury Regulated - D009
7-55 gal. of 1,1,1-trichloroethane
7-55 gal. of Lab Pack
1-55 gal. of Asbestos.
30-55 gal of PCB wastes:
B002, 3, 5 & 7.

- G. The handler notified EPA as a:

Gen., TSD and Transporter

Has EPA or DEC officially modified the handlers status? If so, attach correspondence. _____

2. Status Identification:

This handler should be inspected as a (check each appropriate category after considering exemptions)

A. ☒ Internal
Transporter - complete Appendix B

B. Generator Status Identification 372.1

1. ☐ Category 1 generator - small quantity generator - generates less than 100 kg/mo and stores less than 100 kg. - 372.1(e)(1)(vii)(a) Complete Part II, 1A.
2. ☐ Category 2 generator - small quantity generator - generates less than 100 kg/mo and stores more than 100 kg but less than 1,000 kg. - 372.1(e)(1)(vii)(b) - Complete Part II, 1B.
3. ☐ Category 3 generator - small quantity generator - generates more than 100 kg/mo but less than 1,000 kg/mo and stores less than 1,000 kg. - 372.1(e)(1)(viii) - Complete Part II, 1B and 1C.
4. ☐ Category 5 generator - generated 1,000 kilograms or more per month or generated acute hazardous waste in quantities greater than those specified in Part 372.1(e)(1)(v). Complete Part II. Generators over sole source aquifers also complete Appendix A.
5. ☐ Category 6 generator - stores 1,000 kilograms or more or stores acute hazardous waste in quantities greater than those specified in Part 372.1(e)(1)(v). Complete Part II. Generators over sole source aquifers also complete Appendix A.

C. Treatment, Storage or Disposal Facility Status

If yes, complete Appendix A and other appropriate Appendices.

1. Is hazardous waste generated and stored on-site? If so:
 - (a) ☒ Has hazardous waste been stored on-site longer than 90 days? 373-1.1(d)(1)(iii)
 - (b) ☐ Has more than 8,800 gallons of hazardous waste been stored in containers? 373-1.1(d)(iii)(a)
 - (c) ☐ Has more than 20,000 gallons of hazardous waste been stored in tanks? 373-1.1(d)(iii)(b)

2. YES Hazardous waste received from off-site and not beneficially used, reused or legitimately recycled or stored.

3. NO Hazardous waste is treated on-site.

4. NO Hazardous waste is disposed of on-site.

3. Exemptions

A. Generator Exemptions

(1) _____ Not a regulated handler (be sure to indicate why in Part I 1F and 1G and/or in appropriate exemption below - for example the company notified for precautionary reasons or the waste generated is not hazardous as specified in 371.1(e)(2).

(2) _____ Delisted hazardous waste. IDENTIFY the waste that was delisted: (If the company is in the delisting process they are still regulated until their delisting petition is favorably approved) Complete appropriate parts depending on company status.

(3) _____ Exemption for used engine lubricating oil. 372.1(e)(8) -

(4) _____ Exemption for publicly owned treatment works 372.1(e)(4).

(5) _____ Samples collected for testing. 372.1(e)(5).

(6) _____ Residues of hazardous waste in empty containers. 372.1(e)(6).

(7) _____ A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste treatment manufacturing unit is not subject to regulation until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials. 372.1(e)(7).

B. TSD Exemptions

1. TSD exemptions - 373-1.1(d)(1) (for facilities and operations that manage hazardous waste other than waste oil)

- (a) _____ Storage of hazardous wastes indicated in 373-1.1(d)(4) prior to its beneficial use or reuse or legitimate recycling or reclamation. 373-1.1(d)(1)(vi). If yes, complete Part II, Questions 3, 5, 6, 7.
- (b) _____ Beneficial use or reuse or legitimate recycling or reclamation of a characteristic hazardous waste not identified in 373-1.1(d)(5) other than sludge. (373-1.1(d)(1)(vii)). Complete manifest questions.
- (c) _____ Beneficial use or reuse or legitimate recycling or reclamation of a listed hazardous waste or hazardous waste sludge other than at commercial facilities. Units utilized for precious metal recovery at commercial facilities are exempt. Recyclable materials listed in 373-1.1(d)(5) are not exempt. Any off-site facility must have an EPA identification number. (373-1.1(d)(1)(viii)) Complete manifest questions.
- (d) _____ The treatment of characteristic hazardous waste other than sludge prior to its beneficial use or reuse or legitimate recycling or reclamation. Recyclable materials listed in 373-1.1(d)(5) are not exempt. 373-1.1(d)(1)(ix). Complete manifest questions.
- (e) _____ The treatment of a listed hazardous waste or hazardous waste sludge prior to its beneficial use or reuse or legitimate recycling or reclamation other than at commercial facilities. Units utilized for precious metal recovery at commercial facilities are exempt. Any off-site facility must have an EPA identification number and comply with manifesting requirements. Recyclable materials listed in 373-1.1(d)(5) are not exempt. (373-1.1(d)(1)(x))
- (f) _____ Totally enclosed treatment facility (373-1.1(d)(1)(xi))
- (g) _____ Elementary neutralization units or wastewater treatment units other than units located at commercial facilities. Units utilized for precious metal recovery at commercial facilities are exempt. If yes, complete Part II, 3. (373-1.1(d)(1)(xii))
- (h) _____ A wastewater treatment facility holding a SPDES Permit for a surface water point source discharge that reuses spent pickle liquor or facilities that accumulate, store or physically, chemically or biologically treat spent pickle liquor prior to reuse in a wastewater treatment facility. (373-1.1(d)(1)(xvi))

2. TSD exemptions - 373.1.1 (d)(2) (for facilities and operations that manage waste oils)

- (a) _____ Storage or treatment of waste oil generated on-site prior to its beneficial use or reuse or legitimate recycling or reclamation if the waste oil is not a listed hazardous waste, and the waste oil is not a hazardous sludge. 373-1.1(d)(2)(ii). If yes, complete Part II: 3, 5, 6, 7.
- (b) _____ Exemptions for storage of waste oil at an energy recovery facility prior to its on-site combustion of such waste oils are not listed hazardous wastes, waste oils are not hazardous sludges, and the facility stored less than 80,000 gallons of waste oil. 373-1.1(d)(2)(iii). If yes, complete Part II: 3, 5, 6, 7.
- (c) _____ Combustion units that recover energy from waste oil, other than listed hazardous waste and sludges and the related treatment on-site of such combustion units.

3. TSD exemptions - (for facilities and operations that manage hazardous waste or waste oils).

- (a) _____ Storage of hazardous waste generated and stored on-site for 90 days or less and 8,800 gallons or less is stored in containers or 20,000 gallons or less is stored in tanks. The facility cannot be located in a geographical area overlying a sole source aquifer. If yes, complete Part II. 373-1.1(d)(1)(iii).
- (b) _____ Storage or treatment of hazardous waste on-site of generation if generated and stored less than 1,000 kilograms of hazardous waste in each calendar month and do not generate or store acute hazardous waste as described in 373-1.1(d)(1)(i)(b). 373-1.1(d)(1)(v).
- (c) _____ Treatment or containment activities during an immediate response 373-1.1(d)(1)(xiii).
- (d) _____ Accumulation areas. If yes, complete Part II: 3C, questions 1-5. 373-1.1(d)(1)(xiv).
- (e) _____ Storage of manifested shipments of hazardous waste in containers or vehicles by a transporter at its own transfer facility for 5 days or less. If yes, complete Appendix B: 3. 373-1.1(d)(1)(xv).

4. Environmental Facilities Corporation (EFC) Survey

The following questions are voluntary:

The Environmental Facilities Corporation (EFC) is actively involved in the industrial materials recycling program, and these questions will assist EFC in carrying out this program. It may also be beneficial to the facility being inspected in that acceptable markets or more economical alternatives to the facility's current disposal techniques may be brought to their attention.

- A. Does the company believe their hazardous waste has the potential for recovery, reclamation or exchange with other companies to minimize disposal costs? ☐ Yes ☒ No ☐ Don't Know

If yes:

- B. Does the company wish to list their waste stream in the Northeast Industrial Waste Exchange Listings Catalog? ☐ Yes ☐ No ☐ Don't Know
- C. Does the company want to receive additional information about the potential for waste exchange? ☐ Yes ☐ No ☐ Don't Know
- D. Does the company wish to obtain assistance from the New York State Environmental Facilities Corporation to assess the potential for recovery, reclamation or exchange of the hazardous waste stream? ☐ Yes ☐ No ☐ Don't Know

The Company representative may wish to contact Mr. Pickett Simpson, Hazardous Waste Program Manager, Environmental Facilities Corporation, 50 Wolf Road, Room 527, Albany, New York 12233 at (518) 457-4138.

New York State Department of Environmental Conservation
Division of Solid and Hazardous Waste
Bureau of Hazardous Waste Operations
50 Wolf Road, Albany, New York 12233

Part II

Generator Inspection Section

Indicate:

X Violations

Indicate:

X Satisfactory

NA Not Applicable

Refer to questions based upon category checked in Part I.

1. Requirements for Category 1-3 Generators:

A. If Category 1, the generator has:

- ___ disposed of hazardous waste in a solid waste facility - 372.1(e)(1)(vii)(a)(2) ___
- ___ made a hazardous waste determination - 372.1(e)(1)(vii)(a)(1) ___

B. If Category 2 or 3, the generator has met the following:

- ___ made a hazardous waste determination - 372.1(e)(1)(vii)(b)(1) ___
- ___ disposed of in authorized hazardous waste facility - 372.1(e)(1)(vii)(b)(2) ___
- ___ used appropriate containers; properly packaged, labeled and marked during storage and shipment - 372.1(e)(1)(vii)(b)(4) ___
- ___ had containers and tanks stored properly; not open, not handled or stored in a way which may cause it to leak; inspected at least quarterly - 372.1(e)(1)(vii)(b)(5) ___
- ___ had tanks designed, constructed and operated in accordance with regulations - 372.1(e)(1)(vii)(b)(6) ___
- ___ had tanks properly sheltered and protected - 372.1(e)(1)(vii)(b)(7) ___

C. If Category 3 generator, has:

- ___ annual report prepared and sent to DEC - 372.1(e)(1)(viii)(f) ___
- ___ obtained an EPA Identification Number - 372.1(e)(1)(viii)(b) ___

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

For Category 5 and 6 generators complete remainder of Part II.

2. General Requirement

- A. The generator has made a determination as to whether or not his solid waste is a hazardous waste - 372.2(a)(2) X

3. On-site accumulation of hazardous waste prior to shipment

- A. All such wastes are shipped off-site to an authorized treatment, storage or disposal (TSD) facility in 90 days or less. 372.2(a)(8)(ii) NA

- B. The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container or tank 372.2(a)(8)(ii) NA

- C. Standards for management of containers - 372.2(a)(8)(ii); 373-3.9
(This section will also be completed for TSD's as referred to from Appendix A.)

1. What type of containers are used for accumulation? Describe the size, type. (e.g., 12 fifty-five gallon drums of waste acetone).

55-gal steel & Poly drums
(See Part I section # for
Quantity).

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

2. _____ Each container is marked with the words "Hazardous Waste." 372.2(a)(8): 373-1.1(d)(1)(iii) X
3. _____ The containers appear to be in good condition and are not in danger of leaking. (If containers are leaking, describe the type, condition and number that are leaking or corroded. Be detailed and specific) - 373-3.9(b) X
- _____
- _____
4. _____ Hazardous waste is stored in containers made of compatible materials 373-3.9(c) (If not, please explain). X
- _____
- _____
5. _____ All containers except those in use are closed - 373-3.9(d)(1) X
6. _____ Containers holding hazardous waste must not be opened, handled or stored in a manner which may rupture the container or cause it to leak - 373-3.9(d)(2) X
7. _____ The storage area is inspected at least weekly - 373-3.9(e) X
8. _____ The generator complies with the following special requirements related to storage of ignitable, or reactive wastes 373-3.9(f):
- (a) _____ Containers holding ignitable or reactive waste are located at least 15 meters (50 feet) from the facility property line. 373-3.9(f) X
- (b) _____ Generator has taken precautions to prevent accidental ignition or reaction of ignitable or reactive waste - 373-3.2(h)(1) X
- (c) _____ Generator has placed "No Smoking" signs conspicuously wherever there is a hazard from ignitable or reactive waste - 373-3.2(h)(1) X

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

9. The generator complies with the following special requirements related to incompatible wastes: 373-3.9(g)
- (a) The storage of ignitable or reactive wastes, and the mixture or comingling of incompatible wastes, or incompatible wastes and materials, is conducted to prevent - 373-3.2(h)(2)
- (1) _____ the generation of extreme heat or pressure, fire or explosion, or violent reaction - 373-3.2(h)(2)(i) _____
- (2) _____ production of uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to threaten human health - 373-3.2(h)(2)(ii) _____
- (3) _____ production of uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions - 373-3.2(h)(2)(iii) _____
- (4) _____ the damage to the structural integrity of the device or facility containing the waste - 373-3.2(h)(2)(iv) _____
- (5) _____ a threat to human health or the environment - 373-3.2(h)(2)(v) _____
- (b) _____ Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material. 373-3.9(g)(2) _____
- (c) _____ Hazardous waste in containers stored nearby incompatible waste or material is separated by the incompatible waste by a dike, berm, wall or other device. 373-3.9(g)(3). _____
- D. Standards for management of tanks - 372.2(a)(8)(ii); 373-3.10
1. What are the approximate number and size of tanks containing hazardous waste?
- 6,000 Gal. waste oil tank
- 6-2,000 Gal. PCB contaminated oil
2. Identify the waste treated/stored in each tank. Include whether they are above or below ground.
- Above ground
3. _____ Each tank is marked with the words "Hazardous Waste" /


Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

Tank General Operating Requirements - 373-3.10(b)

4. _____ Hazardous wastes or treatment reagents are not placed in a tank, if they could cause the tank or its inner liner to rupture, leak, corrode, or otherwise fail before the end of its intended life - 373-3.10(b)(2). If so, please explain. 
5. _____ Uncovered tanks have at least 60 centimeters (2 feet) of freeboard or an adequate containment structure - 373-3.10(b)(3) _____
6. _____ Where waste is continuously fed into a tank, the tank must be equipped with a means to stop the inflow (e.g., bypass system to a standby tank or a waste feed cutoff system) - 373-3.10(b)(4) _____

Tank Waste Analysis - 373-3.10(c)

7. _____ There is a waste analysis plan if tank is to be used to chemically treat or store a hazardous waste substantially different from the previous waste, or if a different process is used from the previous process. (Complete Appendix A, Number 4). _____

Tank Inspections - 373-3.10(d)

8. Tank(s) are inspected each operating day for:

- (A) _____ discharge control equipment (e.g., waste feed cutoff systems, bypass systems and drainage systems) - 373-3.10(d)(1)(i) _____
- (B) _____ monitoring equipment (e.g., pressure and temperature gauges) - 373-3.10(d)(1)(ii) _____
- (C) _____ level of waste in tank to ensure proper freeboard - 373-3.10(d)(1)(iii) _____

9. Tank(s) are inspected weekly for:

- (A) _____ Corrosion or leaking of fixtures or seams - 373-3.10(d)(iv) _____
- (B) _____ Erosion or obvious signs of leakage (e.g., wet spots or dead vegetation) of the construction materials of, and the area immediately surrounding discharge confinement structures (e.g., dikes). 373-3.10(d)(v) _____

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

Ignitable or reactive wastes - 373-3.10(f)

- 10. ☐ Ignitable or reactive waste is placed in a tank and the waste is stored, treated, rendered or mixed before or immediately after placement in the tank so that the resulting wastes, mixture or dissolution of material is no longer ignitable or reactive. ☐
- 11. ☐ Ignitable and reactive waste is stored in a tank and the tank is used solely for emergencies. ☐
- 12. ☐ Storage of ignitable or reactive waste in covered tanks complies with the National Fire Protection Association's (NFPA's) buffer zone requirements for tanks, contained in Tables 2-1 thru 2-6 of the "Flammable and Combustible Liquids Code, 1981." ☐

Incompatible Wastes - 373-3.10(g)

- 13. ☐ Incompatible wastes, or incompatible wastes and materials must not be placed in the same tank unless 373-3.2(h)(2) is complied with. 373-3.10(g)(1) ☐
- 14. ☐ Incompatible wastes must not be placed in an unwashed tank which previously held an incompatible waste or material unless 373-3.2(h)(2) is complied with. 373-3.10(g)(2) ☐

Special Requirements in sole source aquifer areas - 373-3.10(h)

- 15. ☐ The base underlying the tank is free of cracks and is sufficiently impervious to contain leaks. ☐
- 16. ☐ The base is designed to drain or the tank is elevated to prevent contact with accumulated liquids. ☐
- 17. ☐ Containment system can contain at least 110 percent of tank volume. ☐
- 18. ☐ Run-on into containment system is prevented or designed for. ☐
- 19. ☐ Leaked waste or accumulated precipitation is timely removed to prevent possible overflow. ☐

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

4. Manifest Records and Reporting

- A. It appears, from the available information, that there is a manifest copy available for each hazardous waste shipment off-site that has been made - 372.2(b)(5)(i). X

If "violation" checked or "don't know," please elaborate.

- B. Describe the approximate size of an average shipment made and how many shipments per month? _____

40,000 lbs/month

- C. Each manifest (a representative sample) has the following information: - 372.2(b)(1); Appendix 30

	Generator	Transporter 1	Transporter 2	TSDF	
1. <u> </u> Name of	<u>X</u>	<u>X</u>	<u> </u>	<u>X</u>	<u>X</u>
2. <u> </u> EPA ID No. of	<u>X</u>	<u>X</u>	<u> </u>	<u>X</u>	<u>X</u>
3. <u> </u> Mailing Address of	<u>X</u>	<u>X</u>	<u> </u>	<u>X</u>	<u>X</u>
4. <u> </u> Telephone No. of	<u>X</u>	<u> </u>	<u> </u>	<u>X</u>	<u>X</u>
5. <u> </u> Manifest Document No. <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>X</u>
6. <u> </u> The proper USDOT description.					<u>X</u>
7. <u> </u> The appropriate <u>X</u> quantity, <u>X</u> container no. <u>X</u> <u> </u> container type, and <u>X</u> waste type by units of weight or volume.					
8. <u> </u> Signed certification that the materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation under regulations of the USDOT and NYSDEC - 372.2(a)(4) and 372.2(a)(5) and 372.2(a)(6).					<u>X</u>
9. <u> </u> Signed copies of the manifest records have been retained at the facility for at least three years - 372.2(c)(1)(i)					<u>X</u>

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- D. ☐ There is written communication that the designated treatment, storage or disposal facility is an authorized treatment, storage or disposal facility for the particular wastes being offered for shipment and has capacity to accept the hazardous waste set forth on the manifest and will assure the ultimate disposal method is followed. 372.2(b)(2)(i) X
- E. ☐ The generator must distribute copies of the manifest as specified on the manifest form - 372.2(b)(3) X
- F. International shipments - 372.5
- (1) ☐ EPA has been notified four weeks prior to shipment of hazardous waste destined for treatment, storage or disposal outside the United States - 372.5(b)(1) N/A
- (2) ☐ Delivery of the wastes has been confirmed within 90 days of acceptance of initial transporter - 372.5(b)(2) ↓
- (3) ☐ The generator has identified the point of departure from the United States through which the waste must travel before entering a foreign country - 372.5(b)(3)(ii) ↓
- G. ☐ Has complied with interstate shipments - 372.6 X
- H. ☐ Has complied with shipments by rail or water (bulk) - 372.7 N/A
- I. ☐ Copies of all records have been kept for at least three years (e.g., annual reports, manifests, exception reports, sampling data) - 372.2(c)(1)(i), (ii), and (iii). X
- J. ☐ All records required under this subdivision were furnished upon request, or made available at a reasonable time for inspection - 372.2(c)(1)(iv) X
- K. ☐ The generator has received signed copies (from the TSD facility) of all manifests for wastes shipped off-site more than 20 days ago: X
- ☐ If not, exception reports have been submitted covering these shipments - 372.2(c)(3) —
- L. ☐ A generator annual report has been prepared and sent to the department. 372.2(c)(2) X

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

5. Personnel Training - 372.2(a)(8)(ii) and 373-3.2(g)

A. There is a:

- ☐ written description of the job title for each position at the facility related to hazardous waste management and name of the employee filling each job - 373-3.2(g)(4)(i) ☒
- ☐ written job description for each position 373-3.2(g)(4)(ii) ☒
- ☐ written description of the type and amount of both introductory and continuing training that will be given to each person related to hazardous waste management - 373-3.2(g)(4)(iii) ☒
- ☐ Records that document the training or job experience required 373-3.2(g)(4)(iv) has been given to and completed by facility personnel. ☒

B. ☐ The training program is directed by a person trained in hazardous waste management procedures and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed. 373-3.2(g)(1)(i),(ii) and (iii). The components are: ☒

- (1) ☐ Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment; ☒
- (2) ☐ Key parameters for automated waste feed cutoff systems; ☒
- (3) ☐ Communications or alarm systems; ☒
- (4) ☐ Response to fires and explosions; ☒
- (5) ☐ Response to groundwater contamination incidents; and ☒
- (6) ☐ Shutdown of operations. ☒

C. ☐ Facility personnel have successfully completed the program by the effective date of these regulations or six months after the date of their employment. 373-3.2(g)(2) ☒

D. ☐ Facility personnel have taken part in an annual review of the initial training required. 373-3.2(g)(3) ☒

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- E. ☐ Training records on current personnel have been kept permanently at the facility (until closure). 373-3.2(g)(5) ☒
- F. ☐ Training records on former employees have been kept for at least three years from the date the employee last worked at a facility. 373-3.2(g)(5) ☒

6. Preparedness and Prevention - 372.2(a)(8)(ii); 373-3.3

- A. ☐ The facility is maintained and operated to minimize the possibility of a fire or explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water - 373-3.3(b) ☒
- B. The facility must be equipped with the following (Check missing equipment if needed in this facility's particular operations.) - 373-3.3(c)
- (1) ☐ An internal communication or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel; ☒
- (2) ☐ A device, such as a telephone or a hand-held, two-way radio capable of summoning emergency assistance from local police departments, fire departments or state or local emergency response teams; ☒
- (3) ☐ Portable fire extinguishers, fire control equipment. ☒
- (4) ☐ Water at adequate volume and pressure to supply water hose streams, or foam-producing equipment, or automatic sprinklers, or water spray systems. ☒
- C. ☐ Facility communications or alarm systems, fire protection equipment, and spill control equipment are tested and maintained as necessary to assure their proper operation in time of emergency - 373-3.3(d) ☒
- D. ☐ Personnel involved in hazardous waste operations have immediate access to an internal alarm or emergency communication device 373-3.3(e) ☒
- E. ☐ The facility has the required aisle space - 373-3.3(f) (Inspections should be able to be made of each drum and space should be sufficient to fight a fire). ☒

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

F. The facility owner or operator has made an attempt in good faith to make the following arrangements with local authorities, as appropriate for the type of waste handled at the facility and the potential need for the services of these organizations - 373-3.3(g)(1):

- (1) — Arrangements to familiarize police, fire departments and emergency response teams with the functions and layout of the facility; X
- (2) — Where more than one police and fire department might respond to an emergency, an agreement designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to primary emergency authority; X
- (3) — Agreements with government emergency response teams, emergency response contractors, and equipment suppliers; X
- (4) — Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illness which could result from fires, explosions or releases at the facility; and X
- (5) — Where state or local authorities decline to enter into such arrangements, the owner or operator has documented the refusal in the operating record. —

7. Contingency Plan and Emergency Procedures - 372.2(a)(8)(ii); 373-3.4

A. — The facility has a contingency plan or some other emergency plan which incorporates hazardous waste management. X

B. The following are included in the contingency plan - 373-3.4(c)

- (1) — A description of actions facility personnel must take in response to fires, explosions or any unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil or surface water; X

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- (2) — A description of arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services; X
- (3) — Names, addresses and phone numbers of all persons qualified to act as emergency coordinator; X
- (4) — A list of all emergency equipment at the facility, and decontamination equipment, where this equipment is required; X
- (5) — The location and the physical description of each item on the list, and a brief outline of its capabilities; X
- (6) — An evacuation plan for facility personnel, where there is a possibility that evacuation could be necessary. X
- C. — Copies of the contingency plan are maintained at the facility - 373-3.4(d)(1) X
- D. — Copies of the contingency plan have been submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services - 373-3.4(d)(2) X
- E. — The contingency plan has been amended - 373-3.4(e) X
- F. — There was at least one employee either on the facility premises or on call with the responsibility for coordinating all emergency response measures - 373-3.4(f) —
- G. — During a past emergency situation the emergency coordinator (or his designee when the emergency coordinator is not on call) immediately activated emergency procedures - 373-3.4(g) N/A

The following was done:

- (1) — Activated internal facility alarms or communication systems;
- (2) — Notified appropriate state or local agencies;
- (3) — Immediately identified the character, extent, exact source, amount and areal extent of any released materials;
- (4) — The emergency coordinator assessed possible hazardous to human health and the environment;

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- (5) — The emergency coordinator, after determining that the facility had a release, fire or explosion which could threaten human health or the environment outside the facility, reported his findings;
- (6) — During the emergency, the emergency coordinator took all reasonable measures necessary to ensure that fire, explosions and releases do not occur, recur or spread to other hazardous waste;
- (7) — The emergency coordinator monitored for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, where appropriate during the facility's response to the emergency;
- (8) — The emergency coordinator provided for treating, storing or disposing of recovered waste, contaminated soil or surface water, or any other material that resulted from a release, fire or explosion at the facility;
- (9) — The emergency coordinator ensured that in the affected area no waste that may be incompatible with the released material was treated, stored or disposed of prior to cleanup procedures being completed;
- (10) — The emergency coordinator ensured that all emergency equipment listed in the contingency plan was cleaned and fitted for its intended use before operations were resumed;
- (11) — The owner or operator notified the Commissioner that the facility is in compliance with Part 373-3.4(g)(8) before operations were resumed in the affected areas of the facility;
- (12) — The owner or operator noted in the operating record the time, date and details of the incident that required implementation of the contingency plan;
- (13) — The owner or operator submitted a complete written report on the incident within 15 days after the incident occurred.

N/A

New York State Department of Environmental Conservation
Division of Solid and Hazardous Waste
Bureau of Hazardous Waste Operations
50 Wolf Road, Albany, New York 12233

Handler Name
EPA ID No.

LILCO - Hicksville
NY0006866008

Appendix A

Treatment, Storage and Disposal Inspection Section
Also complete for generators over sole source aquifer areas.

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

1. Owner Transfer

- (A) — The facility has transferred ownership or operation of facility with prior written approval of the Department - 373-2.2(b)(1). N/A
↓
- (B) — Before transferring ownership or operation of a facility during its operating life, or of a disposal facility during the post-closure care period, the owner or operator notified the new owner or operator in writing of the requirements - 373-3.2(c)(2).

2. Sampling

- (A) — The owner or operator obtained a sample of the waste and had it analyzed - 373-3.2(d)(1)(i); or X
- (B) — The analysis included data developed under 6NYCRR Part 371, and existing published or documented data on the hazardous waste or on waste generated from similar processes - 373-3.2(d)(1)(ii) X
- (C) — The analysis has been repeated as necessary to ensure that it is accurate and up to date - 373-3.2(d)(1)(iii) X

3. Waste Analysis Plan - (Spent Battery Reclaimers do not have to meet Waste Analysis)

- (A) — The owner or operator has developed and followed a written waste analysis plan - 373-3.2(d)(2) X
- (B) — The owner or operator keeps this plan at the facility - 373-3.2(d)(2) X

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(C) The plan specifies at a minimum:

(1) — The parameters for which each hazardous waste will be analyzed and the rationale for the selection of these parameters - 373-3.2(d)(2)(i) ☒

(2) — The test methods which will be used to test for these parameters - 373-3.2(d)(2)(ii) ☒

(3) — The sampling method which will be used to obtain a representative sample of the waste to be analyzed - 373-3.2(d)(2)(iii) ☒

(4) — The frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date - 373-3.2(d)(2)(iv) ☒

(5) — For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply - 373-3.2(d)(2)(v) ☒

(7) (For off-site facilities) The waste analysis plan required must also specify the procedures which will be used to inspect and, if necessary, analyze each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the accompanying manifest or shipping paper. The plan describes, at a minimum:

(a) — The procedure which will be used to determine the identity of each movement of waste managed at the facility - 373-3.2(d)(3)(i); and —

(b) — The sampling method which will be used to obtain a representative sample of the waste to be identified, if the identification method includes sampling - 373-3.2(d)(3)(ii) —

4. Security - 373-3.2(e)

(A) The owner or operator has adequately prevented the unknowing entry, or minimized the possibility for the unauthorized entry, of persons or livestock onto the active portion of his facility, because:

(1) Physical contact with the waste, structures or equipment, YES OR NO or with the active portion of the facility may injure unknowing or unauthorized persons or livestock which may enter the active portion of a facility - 373-3.2(e)(1)(i)

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- (2) Disturbance of the waste or equipment, by the unknowing or unauthorized entry of persons or livestock onto the active portion of a facility, may cause a violation of the requirements - 373-3.2(e)(1)(ii) YES OR NO

(B) If not exempt under A1 or A2 above, the facility must have the following:

- (1) ☐ A 24-hour surveillance system which continuously monitors and controls entry onto the active portion of the facility - 373-3.2(e)(2)(i) or ☒
- (2) ☐ An artificial or natural barrier which completely surrounds the active portion of the facility - 373-3.2(e)(2)(ii)(a) and ☒
- ☐ A means to control entry, at all times, through the gates or other entrances to the active portion of the facility - 373-3.2(e)(2)(ii)(b) ☒
- (3) ☐ A sign with the legend, "Danger - Unauthorized Personnel Keep Out" posted at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to that active portion - 373-3.2(e)(3). ☒

5. General Inspection Requirements - 373-3.2(f)

- (A) ☐ The owner or operator has inspected the facility for malfunctions and deterioration, operator errors, and discharges which may be causing - or may lead to release of hazardous waste constituents to the environment, or a threat to human health - 373-3.2(f)(1) ☒
- (B) (1) ☐ The owner or operator has developed a written schedule for inspecting all monitoring equipment, safety and emergency equipment, security devices, and operating and structural equipment that are important to preventing, detecting or responding to environmental or human health hazards - 373-3.2(f)(2)(i) ☒
- (2) ☐ He has kept the written inspection schedules at the facility - 373-3.2(f)(2)(ii) ☒
- (3) ☐ The schedule identifies the types of problems which are to be looked for during the inspection - 373-3.2(f)(2)(iii) ☒

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- (4) — The frequency of inspection is based on the rate of possible deterioration of the equipment and the probability of an environmental or human health incident, if the deterioration or malfunction or any operator error goes undetected between inspections - 373-3.2(f)(2)(iv) X
- (C) — The owner or operator has remediated deterioration or malfunction of equipment or structures which the inspection has revealed - 373-3.2(f)(3) X
- (D) — The owner or operator has recorded inspections in an inspection log or summary - 373-3.2(f)(4) X
- (E) — The inspection log or summary has been kept for at least three years from the date of inspection - 373-3.2(f)(4) X
- (F) — The records, at a minimum, include the date and time of the inspection, the name of the inspector, a notation of the observations made, and the date and nature of any repairs or other remedial actions - 373-3.2(f)(4) X
6. Ignitable or reactive wastes - Complete Part II, questions 3C 8 and 9 and 3D 10-12.
7. Personnel Training - Complete Part II 5.
8. Preparedness and Prevention - Complete Part II 6
9. Contingency Plan and Emergency Procedures - Complete Part II 7
10. Manifest system, recordkeeping and reporting -
- The regulations in this paragraph apply to the owners and operators of all hazardous waste facilities.
- A. Operating Record - 373-3.5(c)
- (1) — There is an operating record. X

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- (2) ☐ The owner or operator has kept a written operating record at his facility. ☒
- (3) The following information is included in the operating record, as it becomes available, or maintained in the operating record until closure of the facility:
- (a) ☐ A description and the quantity of each hazardous waste received; ☒
- (b) ☐ The method(s) and date(s) of its treatment, storage or disposal at the facility; ☒
- (c) ☐ The location of each hazardous waste within the facility and the quantity at each location; ☒
- (d) ☐ (For disposal facilities) The location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. ☐
- (e) ☐ Information must include cross references to specific manifest document numbers, if the waste was accompanied by a manifest; ☒
- (f) ☐ Records and results of waste analyses and trial tests performed; ☒
- (g) ☐ Summary reports and details of all incidents that require implementing the contingency plan; ☐
- (h) ☐ Records and results of inspections; ☐
- (i) ☐ Monitoring, testing or analytical data where required ☒
- (j) ☐ All closure cost estimates. ☐
- (k) ☐ (For disposal facilities) All post-closure cost estimates. ☐

B. Manifest

- (1) Upon receipt of manifested shipment of hazardous waste the owner or operator:
- (a) ☐ determined significant discrepancies from those stated on the manifest - 372.4(b)(1)(i) ☐

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- (2) ☐ The owner or operator has kept a written operating record at his facility. ☒
- (3) The following information is included in the operating record, as it becomes available, or maintained in the operating record until closure of the facility:
- (a) ☐ A description and the quantity of each hazardous waste received; ☒
- (b) ☐ The method(s) and date(s) of its treatment, storage or disposal at the facility; ☒
- (c) ☐ The location of each hazardous waste within the facility and the quantity at each location; ☒
- (d) ☐ (For disposal facilities) The location and quantity of each hazardous waste must be recorded on a map or diagram of each cell or disposal area. ☐
- (e) ☐ Information must include cross references to specific manifest document numbers, if the waste was accompanied by a manifest; ☒
- (f) ☐ Records and results of waste analyses and trial tests performed; ☒
- (g) ☐ Summary reports and details of all incidents that require implementing the contingency plan; ☐
- (h) ☐ Records and results of inspections; ☐
- (i) ☐ Monitoring, testing or analytical data where required ☒
- (j) ☐ All closure cost estimates. ☐
- (k) ☐ (For disposal facilities) All post-closure cost estimates. ☐

B. Manifest

- (1) Upon receipt of manifested shipment of hazardous waste the owner or operator:
- (a) ☐ determined significant discrepancies from those stated on the manifest - 372.4(b)(1)(i) ☐

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

D. Additional reports - 373-3.5(g)

- (1) ☐ A TSDF Annual Report has been submitted to the department 373-3.5(e). ☒
- (2) ☐ Releases, fires and explosions as specified in paragraph 373-3.4(g)(10) - 373-3.5(g)(1) ☐
- (3) ☐ Groundwater contamination and monitoring data as specified in subdivisions 373-3.6(d) and 373-3.6(e) - 373-3.5(g)(2) ☐
- (4) ☐ Facility closure as specified in subdivision 373-3.7(f) - 373-3.5(g)(3) ☒

11. Groundwater monitoring. - 373-3.6

- (A) ☐ A groundwater monitoring plan is required. ☐
- (B) ☐ ATTACH COMPLETED GROUNDWATER MONITORING QUESTIONNAIRE - APPENDIX C ☐
- (C) ☐ A groundwater monitoring program is required, and has been instituted. ☐

12. Closure and post-closure. - 373-3.7

- (A) ☐ The owner or operator has a written closure plan - 373-3.7(c)(1) ☒
- (1) ☐ The plan is kept at the facility - 373-3.7(c)(1) ☒
- (2) The plan identifies:
- (a) ☐ How and when the facility will be ☐ partially closed if applicable, and ☐ ultimately closed - 373-3.7(c)(1)(i) ☒
- (b) ☐ The maximum extent of the operation which will be unclosed during the life of the facility - 373-3.7(c)(1)(i) ☒
- (c) ☐ All the hazardous waste and hazardous waste residues that must be removed from tanks, discharge control equipment, and discharge confinement structures - 373-3.10(e). ☒

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- (d) An estimate of the maximum inventory of wastes in X
storage or in treatment at any given time during the
life of the facility - 373-3.7(c)(1)(ii)
- (e) A description of the steps needed to
decontaminate facility equipment during closure - X
373-3.7(c)(1)(iii)
- (f) A schedule for final closure including:
- An estimate of the expected year of closure X
- 373-3.7(c)(1)(iv)
- The total time required to close the facility X
- 373-3.7(c)(1)(iv)
- The time required for partial closure
activities which will allow tracking of X
the progress of closure - 373-3.7(c)(1)(iv)
- (B) The owner or operator has amended his plan when changes in
operating plans or facility design affect the closure plan - X
373-3.7(c)(2)
- (C) The owner or operator has submitted his closure plan to the
Commissioner at least 180 days before the date he expects to begin X
closure - 373-3.7(c)(3)

NOTE: The following (13D - 13J) are for owners and operators of disposal facilities only.

(D) Post-closure care consists of at least:

1. Groundwater monitoring and reporting
- 373-3.7(g)(1)(i)
2. Maintenance of monitoring and waste containment systems
- 373-3.7(g)(1)(ii)
3. Maintenance of any or all of the security requirements
if required by the Commissioner - 373-3.7(g)(2)

- (E) Post-closure use of property on or in which hazardous waste remains after closure is disturbing the integrity of the final cover, liner(s), or other components of any containment system, or the function of the facility's monitoring systems, and the owner or operator has demonstrated to the Commissioner, either in the post-closure plan or by petition, that the disturbance:

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

1. ☐ Is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment - 373-3.7(g)(3)(i) ☐
 2. ☐ Is necessary to reduce a threat to human health or the environment - 373-3.7(g)(3)(ii). ☐
 - (F) ☐ The owner or operator of a disposal facility has a written post-closure plan - 373-3.7(h)(1) ☐
 - (G) ☐ The owner or operator of a disposal facility keeps this plan at the facility - 373-3.7(h)(1) ☐
 - (H) This plan identifies:
 1. ☐ Groundwater monitoring activities and frequencies - 373-3.7(h)(1)(i) ☐
 2. ☐ Maintenance activities and frequencies - 373-3.7(h)(1)(ii) ☐
 - (I) ☐ The owner or operator has amended his post-closure plan, and changes have occurred in operating plans or facility designs which affect his post-closure plan - 373-3.7(h)(2) ☐
13. Financial requirements - 373-3.8 Generators only in sole source aquifer areas do not have to meet financial requirements.
- (A) ☐ The owner or operator has a written estimate of the cost of closing the facility - 373-3.8(c)(1) ☒
 - (B) ☐ The estimate appears to equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan. (PLEASE EXPLAIN) ☒
 - (C) ☐ Within 30 days after each anniversary of the date on which the first closure cost estimate was prepared, the owner or operator has adjusted the latest closure cost estimate - 373-3.8(c)(2) ☒
 - (D) ☐ The owner or operator has revised the new closure cost estimate whenever a change in the closure plan affects the cost of closure - 373-3.8(c)(3) ☒
 - (E) ☐ The owner or operator has kept this estimate, and all subsequent estimates required at the facility - 373-3.8(c)(4) ☒

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(QUESTIONS (F) THRU (I) ARE FOR OWNERS AND OPERATORS OF DISPOSAL FACILITIES)

- (F) _____ The owner or operator of a disposal facility has a written estimate of the annual costs of post-closure monitoring and maintenance of the facility - 373-3.8(e)(1) _____
- (G) _____ Within 30 days after each anniversary of the date on which the first post-closure cost estimate was prepared, during the operating life of the facility, the owner or operator has adjusted the latest post-closure cost estimate - 373-3.8(e)(2) _____
- (H) _____ The owner or operator has prepared an annual post-closure cost estimate whenever a change in the post-closure plan affects the cost of post-closure care - 373-3.8(e)(3) _____
- (I) _____ The owner or operator has kept this estimate, and all subsequent estimates required in this Section, at the facility - 373-3.8(e)(4) _____

15. Use and management of containers. - 373-3.9

- (A) Complete Part II-3 C
- (B) _____ Incompatible wastes, or incompatible wastes and materials, are not placed in the same container. - 373-3.9(g)(1) _____
- (C) _____ Hazardous waste is not placed in an unwashed container that previously held an incompatible waste or material. - 373-3.9(g)(2) _____
- (D) _____ A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks or surface impoundments, is separated from the other materials or protected from them by means of a dike, berm, wall or other device. - 373-3.9(g)(3) _____

16. Tanks. - 373-3.10

- (A) Complete Part II-3D
- (B) The tank is to be used to chemically treat or store a hazardous waste which is substantially different from waste previously treated or stored in that tank, and the owner or operator has, before treating or storing the different waste or using the different process:
- (1) _____ Conducted waste analyses and trial treatment or storage tests (e.g., bench scale or pilot plant scale tests - 373-3.10(c)(1)(i)(a) or _____

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

- (2)___ obtained written, documented information on similar storage or treatment of similar waste under similar operating conditions - 373-3.10(e)(1)(i)(b) _____
- (C) Chemically treat hazardous waste with a substantially different process than any previously used in that than, and the owner or operator not, before treating or storing the different waste or using the different process:
- (1)___ Conducted waste analyses and trial treatment or storage tests (e.g., bench scale or pilot plant scale tests) - 373-3.10(c)(1)(i)(a) or _____
- (2)___ Obtained written, documented information on similar storage or treatment of similar waste under similar operating conditions. - 373-3.10(c)(1)(i)(b) _____

New York State Department of Environmental Conservation
Division of Solid and Hazardous Waste
Bureau of Hazardous Waste Operations
50 Wolf Road, Albany, New York 12233

Appendix B

Transporter Terminal Inspection Section

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

1. Manifest Information

	<u>Generator</u>	<u>#1 Transporter</u>	<u>#2 Transporter</u>	<u>TSDF</u>
— Name of	X	—	—	X
— EPA I.D. Number	X	—	—	X
— Mailing Address of	X	—	—	X
— Telephone Number of	X	—	—	X
— Manifest Document No.				
— The proper US DOT description.				X
— The appropriate X quantity, X container no., — container type, X waste type by units of weight or volume.				X
— Signature of transporter acknowledging receipt of materials. — 372.3(b)(1)(iii)				X
— Date of delivery and signature on the appropriate certification on the manifest, 372.3(b)(5)(i)				X
— Signed copies of the manifest records have been retained at the facility for at least three years. 372.3(c)(1)				X

2. — If the transporter has transported wastes into the United States
from abroad, then the transporter has met generator requirements.
372.3(a)(5). Complete Part II. —

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

3. Transporters as temporary storage facilities: 372.3; 373-1.1(d)(1)(xv)

- ___ Maintain a log of the time and date on which each container or transport vehicle of hazardous waste is received or shipped, including manifest number. 373-1.1(d)(1)(xv)(a) ___
- ___ Wastes have remained in the unopened containers as received from generators. 373-1.1(d)(1)(xv)(b) and (c) ___
- ___ The containers are not handled or stored in a manner which may rupture the container or cause it to leak. 373-1.1(d)(1)(xv)(e) ___
- ___ The waste is stored in containers or transport vehicles which meet the USDOT design requirements and are packaged, labeled and marked properly. 373-1.1(d)(1)(xv)(d). ___
- ___ Containers or transport vehicles are inspected daily for leaks and deterioration and an inspection log is kept. 373-1.1(d)(1)(xv)(g) ___
- ___ Containers or transport vehicles holding ignitable or reactive waste are stored greater than 50 feet from the property line and are protected from sources of ignition or reaction 373-1.1(d)(1)(xv)(h) . ___

4. Other Requirements

- ___ 372.3(d) Has met requirements of hazardous waste discharges ___
- ___ 372.3(b)(7)(ii) Rail and water (bulk) must meet 372.7 ___

Handler Name LILCO - Hicksville
EPA ID No. NY DDO 6866008

Company Contact or Official: Steven Dalton Inspected by: Agnes Gava / Margaret Emile

Title: Manager Title: NYDEC-Insp. / Env. Eng.

County/City/Town/Village: Nassau Organization/Region: ___

E/A Number: ___

Date/Time of Inspection: February 27, 1987

Part 364 Permit Number ___

REFERENCE NO. 8

ENVIRONMENTAL
HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent : L.I.L.C.
Pickville
Address: Old Country Rd. Pickville

Inspector

DATE	COMMENTS
	L.I.L.C. Karen Hellman
1/7/68	<p>Re-inspected building that is used to store waste especially waste oil and materials that contain PCB's. The 55 gallon drums are on a rack system that holds the drums stored on wood. These drums are also stored three high on this same rack. The top drums (3rd highest) are held in place by a rope. It appeared these top drums could easily fall and crash to the cement floor. This rack system has a steel beam beam approx 6"-8" high. However, if one of these top drums fall it would not be contained by the rack pan. I inspected the exterior of the metal building (This building is one of those prefabricated metal type) and the interior there appears to be a small berm of metal about 3"-4" high it appears it is sealed at the bottom.</p>
	R.R. Wells

ENVIRONMENTAL
HEALTH
Continuation Sheet
Nassau County Health Department

Owner or
Agent : L.I.L.C.

Inspector

Address:
Old Country Rd. Hicksville

DATE

COMMENTS

12/3/85

Inspection with Tom Davey and Charles Mazzelli.
Mr. Davey stated he is leaving L.I.L.C. within
3 weeks and that Charles Mazzelli will be
resuming his duties. Jim Davey stated they have
closed the General Shop oil reprocessing bldg.
located at the western end of their property and
moved the holding tanks from that bldg and
moved it to Transformer recycle shop
where transformers are drained of their oil if
that oil is contaminated with 500 PCB's
it is put in drums and placed into Annex III bldg.
The transformers are ~~then~~ raised out with mineral
oil and that oil added to some drum with
the PCB oil. In the PCB (Annex III) bldg. Drums
with PCB oil are stored on racks that go 3 drms
high. a oil drip pan is under the drum storage
rack to contain any leaks.

SPDES COMPLIANCE INSPECTION REPORT
Bureau of Land Resources Management
Nassau County Department of Health

Facility Name L.I.L.C. HICKSVILLE
Address OLD COUNTRY RD
Village HICKSVILLE

Facility Representative JIM DALEY Title ENVIRON. ENG Phone _____
Permit No. _____ Expiration Date _____ Date of Inspection ☒ Annual ☐ Reinsp.

Source of Discharge ☐ N/C Cooling Water ☐ Process Water (describe) NONE

INSPECTION REPORT (Explain "NO" answers below)

Item	Yes	No	N/A	Item	Yes	No	N/A
A. Facility as Described in Permit	✓			C. Waste Storage and Handling (cont'd)			
B. Discharge				8. Licensed D.E.C. scavenger	✓		
1. Treatment plant operating properly			✓	Name <u>when enough accumulated</u>			
2. Past operation satisfactory			✓	<u>transport out for bed</u>			
3. All discharges permitted			✓	D. Records			
4. Sampling location adequate			✓	1. D.M.R.'s up to date			✓
5. Sampling technique satisfactory			✓	2. Waste inventory records kept	✓		
C. Waste Storage and Handling				3. Waste reports up to date	✓		
1. Adequate spill control	○	✓		4. Record of spills kept	✓		
2. Proper waste containers	✓			E. Miscellaneous			
3. Containers in good condition	○	✓		1. Compliance schedule being met			
4. Number of containers correct	○	✓		2. Outside lab used			
5. Waste containers properly labeled	✓			If yes, name			
6. Proper stor. of incompatible waste	✓						
7. Drums stacked properly	○	✓		If no, is testing tech. adequate			

Overall Rating: ☒ Satisfactory ☐ Non-Compliance ☐ Major ☐ Minor

Comments:

Signature of Inspector Robert R. Wells Date 12/3/85 Signature of Co. Rep. _____ Date 12/3/85

REFERENCE NO. 9



LONG ISLAND LIGHTING COMPANY

175 EAST OLD COUNTRY ROAD • HICKSVILLE, NEW YORK 11801

Direct Dial Number

October 11, 1985

Ms. Chris Demo
EPA Region II
Permit Administration Branch
26 Federal Plaza, Room 432
New York, NY 10278

Dear Ms. Demo:

LILCO's corporate headquarters has been changed from the Mineola facility (EPA #NYD006978217) to the Hicksville Operation Center (EPA #NYD006866008). The enclosed EPA Form 8700-12 is intended to obtain Transporter status for the Hicksville Operation Center in addition to the Generator and Treatment/Storage/Disposal status presently existing.

TO TRANS? ← *to NH ✓* *Transp* *75D, 66N*

LILCO would also like to eliminate Mineola's Transporter status. This will result in no hazardous waste activity at the Mineola facility. All annual reports and 6NYCRR Part 364 Waste Transporter Permits issued henceforth will list Hicksville as the Company Transporter when the application enclosed is processed.

If you have any questions or require additional information, please contact Ms. J. Policastro of my staff on (516) 420-6138.

Very truly yours,

Madison N. Milhous

Madison N. Milhous, P.E.
Manager
Environmenal Engineering Corporation

JP:ams

enc.

U.S. ENVIRONMENTAL PROTECTION AGENCY
NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTALLATION'S EPA I.D. NO.
I. NAME OF INSTALLATION
II. INSTALLATION MAILING ADDRESS
III. LOCATION OF INSTALLATION

PLEASE PLACE LABEL IN THIS SPACE

INSTRUCTIONS: If you received a preprint label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave items I, II, and III below blank. If you did not receive a preprint label, complete all items. "Installation" means single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. If information requested herein is required by the (Section 3010 of the Resource Conservation and Recovery Act).

FOR OFFICIAL USE ONLY**COMMENTS**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00
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INSTALLATION'S EPA I.D. NUMBER	APPROVED	DATE RECEIVED
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00

I. NAME OF INSTALLATION

LILCO/HICKSVILLE CORPORATE HEADQUARTERS

II. INSTALLATION MAILING ADDRESS**STREET OR P.O. BOX**

3175 EAST OLD COUNTRY ROAD

CITY OR TOWN

HICKSVILLE

ST.

NY

ZIP CODE

11801

III. LOCATION OF INSTALLATION**STREET OR ROUTE NUMBER**

SAME

CITY OR TOWN

SAME

ST.

NY

ZIP CODE

11801

IV. INSTALLATION CONTACT**NAME AND TITLE (Last, First, & Job Title)**

2 MILHOUS MADISON MGR. ENV. ENGR. 516 420 6133

PHONE NO. (area code & no.)**V. OWNERSHIP****A. NAME OF INSTALLATION'S LEGAL OWNER**

8 LONG ISLAND LIGHTING COMPANY

B. TYPE OF OWNERSHIP
(enter the appropriate letter into box)F - FEDERAL
M - NON-FEDERAL

M

VI. TYPE OF HAZARDOUS WASTE ACTIVITY (enter "X" in the appropriate box(es))☒ A. GENERATION☒ B. TRANSPORTATION (complete form VII)☒ C. TREAT/STORE/DISPOSE☐ D. UNDERGROUND INJECTION**VII. MODE OF TRANSPORTATION (transporters only - enter "X" in the appropriate box(es))**☐ A. AIR☐ B. RAIL☒ C. HIGHWAY☐ D. WATER☐ E. OTHER (specify)**VIII. FIRST OR SUBSEQUENT NOTIFICATION**

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA I.D. Number in the space provided below.

☐ A. FIRST NOTIFICATION☒ B. SUBSEQUENT NOTIFICATION (complete form C)**C. INSTALLATION'S EPA I.D. NO.**

NYD00686600

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

IX. DESCRIPTION OF HAZARDOUS WASTES (continued from front)

A. HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.31 for each listed hazardous waste from non-specific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
7	8	9	10	11	12

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four-digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48

D. LISTED INFECTIOUS WASTES. Enter the four-digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54

E. CHARACTERISTICS OF NON-LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non-listed hazardous wastes your installation handles. (See 40 CFR Parts 261.21 - 261.24.)

☐ 1. IGNITABLE
(2001)

☐ 2. CORROSIVE
(2002)

☐ 3. REACTIVE
(2003)

☐ 4. TOXIC
(2004)

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE

M. C. Cordaro

NAME & OFFICIAL TITLE (type or print)

Matthew C. Cordaro, PhD.
Vice President

DATE SIGNED

REFERENCE NO. 10



LONG ISLAND LIGHTING COMPANY

175 EAST OLD COUNTRY ROAD • HICKSVILLE, NEW YORK 11801

Direct Dial Number

December 18, 1984

Mr. Allen Geisendorfer
Industrial Inorganics Section
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-001

Hicksville Operations Center NY0140261

Dear Mr. Geisendorfer:

The Hicksville Operations Center has made several equipment modifications which resulted in the elimination of most of the discharges listed in the original SPDES permit. Since permit modifications have not kept abreast of the facility changes, this letter is intended to clarify and update the discharges from this facility. Also, this will respond to the November 30 Notice of Failure to Submit SPDES DMR.

On November 1, 1983 this facility began discharging into the Nassau County Sewer System thereby eliminating discharges from outfalls 001 through 006. The June 4, 1984 permit modification correctly deleted these discharges leaving outfalls 007A (Cooling Tower Blowdown) and 007B (Non-Contact Cooling (EDP)). The EDP cooling water has since been changed to a closed loop system thereby eliminating outfall 007B. This leaves the following two discharges from this facility:

- 1) Cooling Tower (007A) - No water treatment chemicals are used and due to the evaporation rate during its operating season, no blowdown is necessary. Therefore, the only discharge from this unit is the release of approximately 200 gallons of water in the fall to prepare the unit for winter storage.
- 2) Once through cooling - Well water is used as an initial cooling phase for air conditioning in the main office building. This water is not chemically treated and is discharged to a diffusion well on site. Water usage for this system is approximately 5,000 gallons/day during the cooling season (May-September).

Mr. Allen Geisendorfer
December 18, 1984
Page Two

Please correct the permit as discussed above.

A sample of the material drained from the cooling tower this fall is being analyzed and the results will be submitted within the next month. If you have any questions, please contact Mr. Ken Yager on (516) 420-6142.

Very truly yours,

Steven V. Dalton
Steven V. Dalton
Environmental Engineering Department

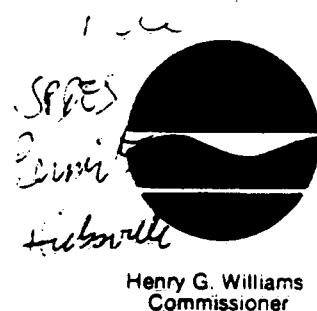
KAY/mac

cc: A. Yerman (NYSDEC - Region 1)
H. Schaefer (NCHD)

REFERENCE NO. 11

New York State Department of Environmental Conservation
Regulatory Affairs Unit
Bldg. 40, SUNY--Room 219
Stony Brook, NY 11794

(516) 751-7900



June 4, 1984

Long Island Lighting Company
175 East Old Country Road
Hicksville, NY 11801

Attention: Raymond Driscoll, P.E.

RE: Modification of Pollutant Discharge Elimination System Permit No.
NY-0140261, UPA File No. 10-82-1071

Dear Mr. Driscoll:

This is to inform you that pursuant to Environmental Conservation Law ("ECL"), Article 17, Title 8 (McKinney's) and 6NYCRR, Part 757, the New York State Department of Environmental Conservation has made a determination to modify your referenced Pollutant Discharge Elimination System Permit as indicated in the revised permit (Pages 1 - 4). The permit is modified to reflect the elimination of discharges from Outfalls 001 through 006 and boiler blowdown from Outfall 007. Also, the reporting frequency has been reduced from quarterly to annually and the compliance schedule has been deleted due to completion of construction.

Unless otherwise specified, this modification will become effective immediately unless you petition, pursuant to ECL, Section 17-0907, that you be given an opportunity to be heard in connection with this determination and where applicable, if no written objection is received by this office within 30 days after receipt of this modification by the Regional Administrator of EPA. Any such petition for a hearing shall contain specific evidence to support your contention that a hearing is necessary and that you were not previously given an opportunity to be heard.

Very truly yours,


Daniel J. Larkin

Regional Permit Administrator

DJL:co's
Enclosure

cc: A. Yerman, NYSDEC, Regional Water Engineer, Stony Brook
R. Hannaford, BWFD
S. Juczak, NCHD ✓

ATTACHMENTS: GENERAL COMPLIANCE

ITION: PART II (8/81),
CHEDULE

SIC Code: 4911

Waived

Copies:

SPDES File

Region # 1

NCDES

Mr. Pulaski - BWFD

Mr. Adamczyk - BWFD

Facility ID No.

: NY- 014 0261

Effective Date (EDP) : October 1, 1982

Expiration Date (ExDP) : EDP + 5 years

Modified : January 17, 1983

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
DISCHARGE PERMIT

MODIFIED: 8/5/83

MODIFIED: 6/4/84

Special Conditions
(Part I)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et. seq.) (hereinafter referred to as "the Act").

Permittee Name: Long Island Lighting Company

Permittee Street: 175 East Old Country Road

Permittee City: Hicksville

State: NY

Zip Code: 11801

is authorized to discharge from the facility described below:

Facility Name: Hicksville Operations Center

Facility Location (C,T,V): 175 Old Country Road County: Nassau County

Facility Mailing Address (Street): 175 Old Country Road

Facility Mailing Address (City): Hicksville

State: NY

Zip Code: 11801

into receiving waters known as:

Groundwaters
Class GA
Latitude 40° 36'
Longitude 73° 31'

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal as prescribed by Sections 17-0803 and 17-0804 of the Environmental Conservation Law and Parts 621, 752, and 755 of the Departments' rules and regulations.

By Authority of William L. Garvey, P.E., Chief, Permit Administration Section
Designated Representative of Commissioner of the
Department of Environmental Conservation

8/31/82
Date

[Signature]
Signature

Final **EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

During the period beginning EDP + 12 months (October 1, 1983)
 and lasting until EDP + 5 Years (October 1, 1987)
 the discharges from the permitted facility shall be limited and monitored by the
 permittee as specified below:

<u>Outfall Number & Effluent Parameter</u>	<u>Discharge Limitations</u>		<u>Units</u>	<u>Minimum Monitoring Requirements</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>		<u>Measurement Frequency</u>	<u>Sample Type</u>
007-a Cooling Tower Blowdown					
Flow		1000	gpd	Quarterly*	Instantaneous
Iron		0.6	mg/l	Quarterly*	Grab
Copper		1.0	mg/l	Quarterly*	Grab
Zinc		5.0	mg/l	Quarterly*	Grab
pH	6.5 - 8.5 (Range)			Quarterly*	Grab
007-b Non-Contact Cooling Water**					
pH	6.5 - 8.5 (Range)			Semi-Annual	Grab

*Sampling to be obtained prior to combination with cooling water.

**EDP cooling water may be discharged at ambient intake pH. (Monitoring of intake pH is required to claim this exception.)

Definition of Daily Average and Daily Maximum

MODIFIED: August 5, 1983

MODIFIED: JUNE 4, 1984

The daily average discharge is the total discharge by weight or in other appropriate units as specified herein, during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges in appropriate units as specified herein divided by the number of days during the calendar month when the measurements were made.

The daily maximum discharge means the total discharge by weight or in other appropriate units as specified herein, during any calendar day.

Monitoring Locations

Permittee shall take samples and measurements to meet the monitoring requirements at the location(s) indicated below: (Show locations of outfalls with sketch or flow diagram as appropriate).

1. Outfall 007-b, at the effluent pipe discharging to the Nassau County Recharge Basin.

ADDITIONAL REQUIREMENTS

1. pH effluent limits may be modified if groundwater quality exceeds these limits and the monitoring program demonstrates that pH discharges do not greatly fluctuate in characteristic.
2. There shall be no discharge of PCB's or cooling tower cleaning wastes from this facility. The name of the hauler hired to remove cooling tower cleaning wastes shall be reported on the DMR.
3. There shall be no chemicals added to non-contact cooling water discharged via outfall 007.

MONITORING, RECORDING AND REPORTING

Part I

Page 4 of 4

Facility ID No.: NY 010 0261

MODIFIED: JUNE 4, 1984

a) The permittee shall also refer to the General Conditions (Part II) of this permit for additional information concerning monitoring and reporting requirements and conditions.

b) The monitoring information required by this permit shall be summarized and reported by submitting a completed and signed Discharge Monitoring Report form once every 12 months to the Department of Environmental Conservation and other appropriate regulatory agencies at the offices specified below. The first report will be due no later than January 28, 1984. Thereafter, reports shall be submitted no later than the 28th of the following month(M):
January

Water Division
New York State Department of Environmental Conservation
50 Wolf Road - Albany, New York 12233

New York State Department of Environmental Conservation
Regional Engineer #1
Building #40 SUNY
Stony Brook, NY 11794

Nassau County Dept. of Health
240 Old Mineola Road
Mineola, NY 11501

☐ (Applicable only if checked):

Dr. Richard Baker, Chief - Permits Administration Branch
Planning & Management Division
USEPA Region II
26 Federal Plaza
New York, New York 12078

c) If so directed by this permit or by previous request, Monthly Wastewater Treatment Plant Operator's Reports shall be submitted to the DEC Regional Office and county health department or county environmental control agency specified above.

d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

e) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Reports.

f) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in the permit.

g) Unless otherwise specified, all information submitted on the Discharge Monitoring Form shall be based upon measurements and sampling carried out during the most recently completed reporting period.

h) Blank Discharge Monitoring Report Forms are available at the above addresses.

REFERENCE NO. 12



LONG ISLAND LIGHTING COMPANY

175 EAST OLD COUNTRY ROAD • HICKSVILLE, NEW YORK 11801

Raymond J. Driscoll
Manager
Environmental Engineering
Direct Dial Number (516) 420-6130

January 6, 1984

Mr. George K. Hansen
Chief, Source Surveillance Section
Bureau of Wastewater Facilities Operations
Division of Water
New York State Department of Environmental
Conservation
50 Wolf Road, Room 324
Albany, New York 12233-0001

Port Jefferson Power Station	NY0005932
Northport Power Station	NY0103560 (NY0005941)
E. F. Barrett Power Station	NY0104094
Glenwood Power Station	NY0104108
Far Rockaway Power Station	NY0106500
Holtville LNG Storage Facility	NY0109193
Brentwood Operations Center	NY0108898
Hicksville Operations Center	NY0140261

Dear Mr. Hansen:

Enclosed are completed Discharge Monitoring Reports (DMRs) submitted in compliance with the above referenced permits. The results reported are from sampling conducted during the period of September 1, 1983 through November 30, 1983.

Two major changes enacted during this quarter were the connection of Hicksville Operations Center to the sewer system on October 6, 1983 and the issuance of the new Northport permit. In addition to the sewer hookup, Hicksville's Final Effluent Limitations, which now include a quarterly zinc analysis, became effective October 1, 1983. Although the metal sample was taken, the lab, operating under the interim permit, inadvertantly did not analyze for zinc. Also, 2 pH values and the quarterly flow value were inadvertantly missed. Since outfall 007 now discharges only Cooling Tower Blowdown and Once Through Cooling Water (no additives) as explained in our

RECEIVED

JAN 12 1984

NCDH
ALRM

Mr. George K. Hansen
January 6, 1984
Page 2

October 5, 1983 correspondence, the permit conditions should be modified accordingly. Because the Northport permit was not received until November 8 and a significant effort was required to revise the monitoring schedule, the existing sampling schedule was followed for that month. Consequently, the first monthly DMR will be for December and will be submitted on January 28, 1984.

Exceedances of the Port Jefferson permit limits were seen at outfall 002 for vanadium and iron (1 daily maximum and 1 average each) and one daily maximum for total suspended solids at outfall 005. Outfall 002 exceedances are attributed to inadequate flushing of the piping following their use as boiler wash waste transport lines to the treatment facility and prior to placing them back into service as yard drains. Procedures are being modified to increase the flushing time thereby eliminating this condition in future yard drain discharges. The total suspended solids concentration at 005 is due to runoff and not to any plant activities. Also, there were six minor exceedances (0.6) of the 0.5 mg/l chlorine limit at 009.

Holtsville LNG experienced two exceedances of the daily maximum limit, one for tin and one for pH at outfall 007. As mentioned in the two previous DMRs, the natural groundwater pH is less than 6.5 and the minimum limit should be modified accordingly. An explanation for the high tin is still being studied as we discussed in the last DMR. However, the biocide which contains the tin will be discontinued in the near future as per recent correspondence with the DEC and Drew Chemical Corporation.

The reason for the eight exceedances of the daily maximum limit for vanadium at the Northport Station are under investigation.

If you have any questions, please contact Mr. Ken Yager of my staff on (516) 420-6142.

Very truly yours,



Raymond J. Driscoll, P.E.
Manager
Environmental Engineering Dept.

KAY/cg

cc: Messrs. A. Yerman (NYSDEC-Region 1)
A. Geisendorfer (NYSDEC)
S. Costa (SCHD)
J. Schechter (NCHD)
R. Koopman (THDEP-Northport Only)

REGION	COUNTY	DATE PRODUCED	PAGE
1	28 NASSAU	11-03-83	1 of 1
FACILITY I.D.		REPORT PERIOD	
NY0104108		09-01-83 THRU 11-30-83 6	

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES — DISCHARGE MONITORING REPORT

SEE THE REVERSE SIDE OF PART 4 FOR INSTRUCTIONS



TOXIC PARAMETER/UNITS	OUT FALL	MONITORING LOCATION	REPORT SECTION				SAMPLE CHARACTERISTICS		
			LIMIT	MINIMUM	AVERAGE	MAXIMUM	# EX.	TYPE	FREQUENCY
	051	Boiler Wash Water	REPORTED VALUE	No Discharge to Groundwater					
			LIMIT						
			REPORTED VALUE						
			LIMIT						
			REPORTED VALUE						
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			LIMIT						
			REPORTED VALUE						

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

TYPEWRITTEN NAME AND TITLE

J. R. Gummersall, Jr. Vice President

☒ 1 PERMITTEE☐ 2 AGENT

SIGNATURE

J. R. Gummersall Jr.

DATE

01-05-84

LONG ISLAND LIGHTING CO
GLENWOOD POWER STATION
175 E OLD COUNTRY RD
HICKSVILLE NY 11801

NY0104108
01 ST1 02
BS 17 SUB 02

DO NOT SEND A COPY TO EPA

PART 1—ENCON COPY

REGION 1	COUNTY 28 NASSAU	DATE PRODUCED 11-03-83	PAGE 1 of 2
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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES — DISCHARGE MONITORING REPORT



SEE THE REVERSE SIDE OF PART 4 FOR INSTRUCTIONS

FACILITY I.D. NYC104094	REPORT PERIOD 09-01-83 THRU 11-30-83	1
----------------------------	---	---

TOXIC HVY MET PARAMETER/UNITS	OUT FALL	MONITORING LOCATION	REPORT SECTION 1				SAMPLE CHARACTERISTICS	
			LIMIT	MINIMUM	AVERAGE	MAXIMUM	# EX.	FREQUENCY
FLOW GPD	005B	EFFLUENT VALUE 0100056060501	REPORTED VALUE	MONITORING 0.0	REQUIRED- 54,462	NO LIMITS 207,000		CONTINUOUS
AMMONIA MG/L	005B	EFFLUENT VALUE 0271845010501	REPORTED VALUE	MONITORING No Metal	REQUIRED- Cleaning	NO LIMITS	GRAB	2/MONTH
PH SU	005B	EFFLUENT VALUE 0400400120501	REPORTED VALUE	LIMIT 6.0000	*****	*****	INSTANTAN	WEEKLY
OIL AND GREASE MG/L	005B	EFFLUENT VALUE 0500550010501	REPORTED VALUE	LIMIT 6.2	*****	*****	GRAB	DAILY
OIL AND GREASE MG/L	005B	EFFLUENT VALUE 0660550010501	REPORTED VALUE	LIMIT 8.1	*****	*****	GRAB	35/Period WEEKLY
CHROMIUM HEX MG/L	005B	EFFLUENT VALUE 0701032010501	REPORTED VALUE	LIMIT 0.0500	*****	*****	24 HR COMP	MONTHLY
MANGANESE-TOTAL MG/L	005B	EFFLUENT VALUE 0801055010501	REPORTED VALUE	LIMIT 1.0000	*****	*****	24 HR COMP	MONTHLY
VANADIUM TOTAL MG/L	005B	EFFLUENT VALUE 0901087010501	REPORTED VALUE	LIMIT 15.0000	*****	*****	24 HR COMP	2 PER WEEK
SUSPENDED SOLIDS MG/L	005B	EFFLUENT VALUE 1080154010501	REPORTED VALUE	LIMIT 30.0000	*****	*****	24 HR COMP	WEEKLY
				LIMIT 3.0	*****	*****	Grab	34/Period

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

TYPEWRITTEN NAME AND TITLE

J. R. Gummersall, Jr. Vice President

☒ 1 PERMITTEE☐ 2 AGENT

SIGNATURE

JRGummersall Jr

DATE

01-05-84

LONG ISLAND LIGHTING CO
E F BARRETT POWER STATION
175 E OLD COUNTRY RD
HICKSVILLE NY 11801

NY0104094
01 STI 02
BS 17 SUB 01

DO NOT SEND A COPY TO EPA

PART 1—ENCON COPY

REGION 1	COUNTY 28 NASSAU	DATE PRODUCED 11-05-83	PAGE 2 of 2
FACILITY I.D. NY0104094		REPORT PERIOD 09-01-83 THRU 11-30-83	1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES — DISCHARGE MONITORING REPORT

SEE THE REVERSE SIDE OF PART 4 FOR INSTRUCTIONS



TOXIC HWY MET PARAMETER/UNITS	OUT FALL	MONITORING LOCATION	REPORT SECTION				SAMPLE CHARACTERISTICS		
			LIMIT	MINIMUM	AVERAGE	MAXIMUM	# EX.	TYPE	FREQUENCY
SUSPENDED SOLIDS	040	EFFLUENT VALUE	REPORTED	*****	30.0000	50.0000		CRAS	WEEKLY
0.1		110015+014001	VALUE	*****					
IRON TOTAL MG/L	005E	EFFLUENT VALUE 1285006010501	LIMIT	*****	0.5000	1.0000		24 HR COMP	MONTHLY
			REPORTED	*****	No Metal	Cleaning			
CHROMIUM TOTAL MG/L	005E	EFFLUENT VALUE 1385007010501	LIMIT	*****	0.5000	1.0000		24 HR COMP	MONTHLY
			REPORTED	*****	No Metal	Cleaning			
COPPER TOTAL MG/L	005E	EFFLUENT VALUE 1485009010501	LIMIT	*****	*****	1.0000		24 HR COMP	2 PER WEEK
			REPORTED	*****	No Metal	Cleaning			
NICKEL TOTAL MG/L	005E	EFFLUENT VALUE 1585010010501	LIMIT	*****	1.0000	2.0000		24 HR COMP	MONTHLY
			REPORTED	*****	No Metal	Cleaning			
IRON-TOTAL MG/L	005E	EFFLUENT VALUE 1685012010501	LIMIT	*****	*****	1.0000		24 HR COMP	2 PER WEEK
			REPORTED	*****	No Metal	Cleaning			
			LIMIT						
			REPORTED						
			LIMIT						
			REPORTED						
			LIMIT						
			REPORTED						
			LIMIT						
			REPORTED						

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

TYPEWRITTEN NAME AND TITLE

☒ 1 PERMITTEE
☐ 2 AGENT

J. R. Gummersall, Jr. Vice President

SIGNATURE

J. R. Gummersall, Jr.

DATE

01-05-84

LONG ISLAND LIGHTING CO
 E F BARRETT POWER STATION
 175 E OLD COUNTRY RD
 HICKSVILLE NY 11801

NY0104094
 01 STI 02
 BS 17 SUE 01

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PART 1—ENCON COPY

REGION	COUNTY	DATE PRODUCED	PAGE
1	28 NASSAU	12-01-83	1 of 1
FACILITY I.D.		REPORT PERIOD	
NY0140261		10-01-83 THRU 12-31-83	1

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES — DISCHARGE MONITORING REPORT

SEE THE REVERSE SIDE OF PART 4 FOR INSTRUCTIONS



TOXIC HVB MET ORG PARAMETER/UNITS	OUT FALL	MONITORING LOCATION	REPORT SECTION				SAMPLE CHARACTERISTICS		
			LIMIT	MINIMUM REPORTED VALUE	AVERAGE REQUIRED	MAXIMUM NO LIMITS	# EX.	TYPE	FREQUENCY
LOW OPD	007	BOILER BLOWDOWN 0100056060703016						INSTANTAN	0-1111
LOW OPD	007	BOILER BLOWDOWN 0200056060703016				1000.0000		INSTANTAN	QUARTERLY
H SU	007	BOILER BLOWDOWN 0300400120703016				6.3000	1	GRAB	Monthly
INC TOTAL MG/L	007	BOILER BLOWDOWN 0485006010703016				5.0000		GRAB	Quarterly
OPPER TOTAL MG/L	007	BOILER BLOWDOWN 0585009010703016				1.0000		GRAB	Quarterly
IRON-TOTAL MG/L	007	BOILER BLOWDOWN 0685012010703016				0.05		GRAB	Quarterly
						0.5000		GRAB	Quarterly

I hereby affirm under penalty of perjury that information provided on this form is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

PREWRITTEN NAME AND TITLE

S. L. Koslow, Director

SIGNATURE

☒ 1 PERMITTEE
☐ 2 AGENT

DATE

1-05-84

LONG ISLAND LIGHTING CO
 HICKSVILLE OPERATIONS CENTER
 175 EAST OLD COUNTRY ROAD
 HICKSVILLE NY 11801

NY0140261
 01 STI 02
 05 17 SUB 02

DO NOT SEND A COPY TO EPA

PART 1—ENCON COPY

REFERENCE NO. 13



LONG ISLAND LIGHTING COMPANY

1650 ISLIP AVENUE • BRENTWOOD, NEW YORK 11717

Direct Dial Number:

November 19, 1982

Mr. Allan Geisendorfer
Senior Sanitary Engineer
Industrial Inorganics Section
New York State Department of
Environmental Conservation
50 Wolf Road
Albany, NY 12233

Hicksville Operating Center NYC140261

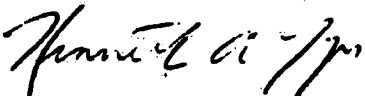
Dear Mr. Geisendorfer:

As we discussed on November 9, 1982, the above referenced facility no longer treats the cooling tower water with dodecyl guanidine hydrochloride, methylene phosphonic acid and isopropanol as mentioned in the SPDES permit. This practice was discontinued during this past summer. In addition, the cooling tower is not in service during the winter months.

Therefore, since we are no longer discharging these products, we request that we be exempted from the required analysis and the permit be revised to account for this procedural change.

If you have any questions, please contact me at (516) 420-6142.

Very truly yours,


Kenneth A. Yager
Environmental Engineering

KAY/jet

RECEIVED

NOV 26 1982

WATER & WASTE

REFERENCE NO. 14



LONG ISLAND LIGHTING COMPANY

175 EAST OLD COUNTRY ROAD • HICKSVILLE, NEW YORK 11801

Direct Dial Number

October 14, 1982

Mr. Albert Machlin
Regional Engineer
NYS Department of Environmental
Conservation
Building 40 S.U.N.Y.
Stony Brook, NY 11794

Hicksville Operating Center
Hazardous Waste Storage Facilities

Dear Mr. Machlin:

Enclosed is LILCO's application for a 360 permit to operate existing industrial waste storage and handling facilities at our Hicksville Operating Center. Two waste handling operations are conducted at Hicksville. One involves the storage of chemical hazardous wastes such as solvents, paints, corrosives, etc. and the other involves the storage and handling of waste dielectric oil and electrical equipment containing dielectric oil.

The dielectric oil storage and handling operation is conducted in four separate areas. In three of these areas the dielectric oil handled may contain PCB's. These areas are called 1) The Annex III PCB storage area, 2) The 30 Day Temporary Oil Storage area and, 3) The General Shops Recycling Shop. The fourth area called the Transformer Oil Reprocessing Facility handles only non PCB (50ppm) dielectric oil. This area is not a hazardous waste handling facility but does fall within the requirements for a 360 permit as indicated in Section 360.8(b)6.

Application was made to EPA in November 1980 to obtain interim authorization to operate the Chemical Hazardous Waste Storage area. Application for interim authorization for the dielectric oil handling facilities was not required because EPA hazardous waste regulations do not include PCB's within the RCRA definition of hazardous waste. All PCB wastes are handled in accordance with TSCA regulations as listed in 40CFR761.

RECEIVED

OCT 19 1982

Page 2

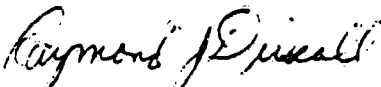
Mr. Albert Machlin

October 14, 1982

As indicated in the enclosed applications, the overall waste handling philosophy at LILCO is to temporarily store hazardous wastes at the Hicksville facility for as short a duration as possible, followed by permanent disposal at a licensed offsite Treatment, Storage or Disposal Facility.

If you have any questions regarding the enclosed application, please contact Mr. Steve Dalton of my staff at 420-6132.

Very truly yours,



Raymond J. Driscoll

RJD/dpm

Enclosure

cc: L. Sama (NCHD)

RECEIVED
OCT 19 1982
NCDH
BLRM

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
**APPLICATION FOR APPROVAL TO OPERATE
 A SOLID WASTE MANAGEMENT FACILITY**

SEE APPLICATION INSTRUCTIONS ON REVERSE SIDE

FOR STATE USE ONLY

1. OWNER'S NAME Long Island Lighting Company		2. ADDRESS (Street, City, State, Zip Code) 175 E. Old Country Rd., Hicksville N.Y. 11801		3. Telephone No. (516) 733-4137	
4. OPERATOR'S NAME Same		5. ADDRESS (Street, City, State, Zip Code)		6. Telephone No.	
7. ENGINEER'S NAME Raymond J. Driscoll		8. ADDRESS (Street, City, State, Zip Code) 175 E. Old Country Rd., Hicksville N.Y. 11801		9. Telephone No. (516) 733-4137	
10. ON-SITE SUPERVISOR D. Hunt		11. ADDRESS (Street, City, State, Zip Code) 175 E. Old Country Rd., Hicksville N.Y. 11801		12. Telephone No. (516) 733-4328	
13. HAS THE INDIVIDUAL NAMED IN ITEM 10 ATTENDED A DEPARTMENT SPONSORED OR APPROVED TRAINING COURSE? <input type="checkbox"/> Yes <u>Date</u> <u>Course Title</u> <u>Location</u> <input checked="" type="checkbox"/> No					
14. PROJECT/FACILITY NAME Hicksville Hazardous Waste Storage Facilities		15. COUNTY IN WHICH FACILITY IS LOCATED Nassau		16. ENVIRONMENTAL CONSERVATION REGION 1	
17. TYPE OF PROJECT FACILITIES: <input type="checkbox"/> Composting <input type="checkbox"/> Transfer <input type="checkbox"/> Shredding <input type="checkbox"/> Baling <input type="checkbox"/> Sanitary Landfill <input type="checkbox"/> Incineration <input type="checkbox"/> Pyrolysis <input type="checkbox"/> Resource Recovery-Energy <input type="checkbox"/> Resource Recovery-Materials <input checked="" type="checkbox"/> Other TEMPORARY STORAGE					
18. HAS THIS DEPARTMENT EVER APPROVED PLANS AND SPECIFICATIONS AND/OR ENGINEERING REPORTS FOR THIS FACILITY? <input type="checkbox"/> Yes <u>Date</u> <input checked="" type="checkbox"/> No					
19. LIST WASTES See attached documentation for details					

20. BRIEFLY DESCRIBE OPERATION

The waste storage and handling facilities at Hicksville cover 2 general operations
 1) the temporary storage of chemical hazardous wastes and; 2) the temporary storage, handling and reprocessing of dielectric oils and dielectric oil filled electrical equipment. Such oil and equipment may or may not contain PCBs. Five separate areas are used for the above purposes:

- A-The Chemical Hazardous Waste Storage Area
- B-The Annex III PCB Storage Area
- C-The General Shops Recycling Shop
- D-The 30 day Temporary PCB Storage Facility
- E-The dielectric oil reprocessing facility

Areas A-D are considered hazardous waste facilities. Area E is for non hazardous materials.

'See attached sheet for list of waste transporters'

21. IF FACILITY IS A SANITARY LANDFILL, PROVIDE THE FOLLOWING INFORMATION: a. Total usable area: (Acres) Initially _____ Currently _____			b. Distance to nearest offsite, downgradient, water supply well _____ Feet		c. No. of groundwater monitoring wells Upgradient _____ Downgradient _____	
22. INDICATE WHICH ATTACHMENTS, IF ANY, ARE INCLUDED WITH THIS APPLICATION: <input type="checkbox"/> Form 47-19-2 or 58-7 <input checked="" type="checkbox"/> Operations Plan & Report <input type="checkbox"/> USGS Topographic Map <input type="checkbox"/> Record Forms <input checked="" type="checkbox"/> Other See Attachments <input type="checkbox"/> Construction Certificate <input type="checkbox"/> Boring Logs <input type="checkbox"/> Water Sample Analysis <input type="checkbox"/> None						
23. CERTIFICATION: I hereby affirm under penalty of perjury that information provided on this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. <u>10/14/82</u> <u>Raymond J. Driscoll</u> <u>Manager, Environmental Engineering</u> Date Signature and Title						

CENTRAL OFFICE COPY.

The following is a list of the TSD facilities which are routinely contracted by the Long Island Lighting Company for recycling or disposal purposes and the wastes associated with each facility. These facilities may or may not use their own vehicles to transport the wastes, if their vehicles are not available, a contracted hauler is sent by the TSD facility.

<u>TSD Facility</u>	<u>Waste</u>	<u>Frequency of Collection</u>
ENSCO: Energy Systems Company American Road P. O. Box 1975 El Dorado, Arkansas 71730	PCB Capacitors	1 per year
	PCB Liquids	2 per year
or		
Rollins Environmental Services, Inc. P. O. Box 609 Deer Park, Texas 77536		
CECOS International P. O. Box 619 Niagara Falls Blvd. Niagara Falls, N.Y. 14302	PCB Solids in Drums	More than 3 per year
SCA Chemical Services Company 107 Albert Avenue Newark, N.J. 07105	6NYCRR Part 364 Waste Code #'s 1, 2, 3, 9, 10, 11, 12, 13, 15	1 per year
or		
CECOS International		
or		

PERMIT COMPLIANCE INSPECTION REPORT

Bureau of Land Resources Management

Nassau County Department of Health

Facility Name: **L.L.C.O.**

Address: **175 E 1st Country Rd Wicksville**

Company Representative: **JIM DASHKE**

Title:

Phone: **430-614**

Permit No. **30-11-237**

☐ New ☐ Renewal

Effective Date of Permit: **6/15/83**

Expiration Date of Permit: **5/31/86**

Item	Yes	No	N/A	Item	Yes	No	N/A
1. Waste Storage and Handling				3. Records (Cont'd.)			
A. Adequate Spill Control?				D. Record of spills & notification of N.C.H.D.?			
B. No obvious infraction of Fire Code?				E. Record of special sampling results?			
C. Proper waste containers?				4. Records kept a minimum of 3 years?			
D. Proper Storage of incompatible wastes?				5. Reports submitted on time?			
E. Waste containers properly labeled?				6. Waste storage in conformance with permit?			
F. Proper drum stack size and aisles?				Quantities O.K.?			
G. Containers off ground and not leaking?				Drums 27 ON HAND			
H. Waste stored in secure area?				Tanks			
2. Registered Industrial Waste Scavenger?				Maximum storage time O.K.?			
Name INDIAN POLLUTION CONTROL				7. Sampling in conformance with permit?			
DEC # MA-010				8. Is compliance schedule met as required by permit?			
<input type="checkbox"/> Different scavenger since last report				9. Overall Inspection Rating			
3. Records				<input type="checkbox"/> Satisfactory			
A, B, C Proper waste inventory records?				<input type="checkbox"/> Non-Compliance			
				<input type="checkbox"/> Major			
				<input checked="" type="checkbox"/> Minor			

Date	Item	Comments
		LAST PICKUP 1 DRUM PCB OIL 11/9/83
		STORAGE AREA NEEDS TO BE CIRCLED & MARKED
		SED INC 6519 SWING CT GREENSBORO NC 27409
		919-285-1682

Signature of Inspector: **A. L. [Signature]** Date: **11/15/83**

Signature of Company Representative: **JIM DASHKE** Date: **11/15/83**

430-6143 JIM DASHKE

ENVIRONMENTAL
HEALTH
Continuation Sheet
Nassau County Health Department

Owner or L.I. : O
Agent : HICKSVILLE OPERATING CNTR
Address: 175 E. OLD COUNTRY RD
HICKSVILLE

LS
RW
Inspector

DATE

COMMENTS

On 1/14/83 H. Schaefer & R. Willie met with James Darcy & William Faraday for the purpose of conducting a SPDES & fast 360 inspection. The SPDES inspection consisted of an inspection of the sampling point for discharge 002 which receives blowdown waste. This point is the southernmost drainage catch ~~basin~~ located on the North-South access road to the Nassau County Recharge Basin on the eastern side of the property (see attached drawing).

The 360 inspection, recorded on an inspection sheet, showed a satisfactory condition.

Chemical hazardous waste storage is outside on a fenced-in pad. Dielectric oils are handled as outlined on the attached flow chart. Oils of < 50 ppm PCB are either burned at Glenwood Landing or cleaned and reused. Oils > 50 ppm PCB are stored prior to shipping to an approved disposal facility. PCB spill debris > 50 ppm is also stored prior to disposal. Capacitors of > 500 ppf are disposed of, others may be reused or sold to a metal recycler, also true for transformers. The attached flowchart depicts this.

Howard Schaefer

FIGURE NO. 2

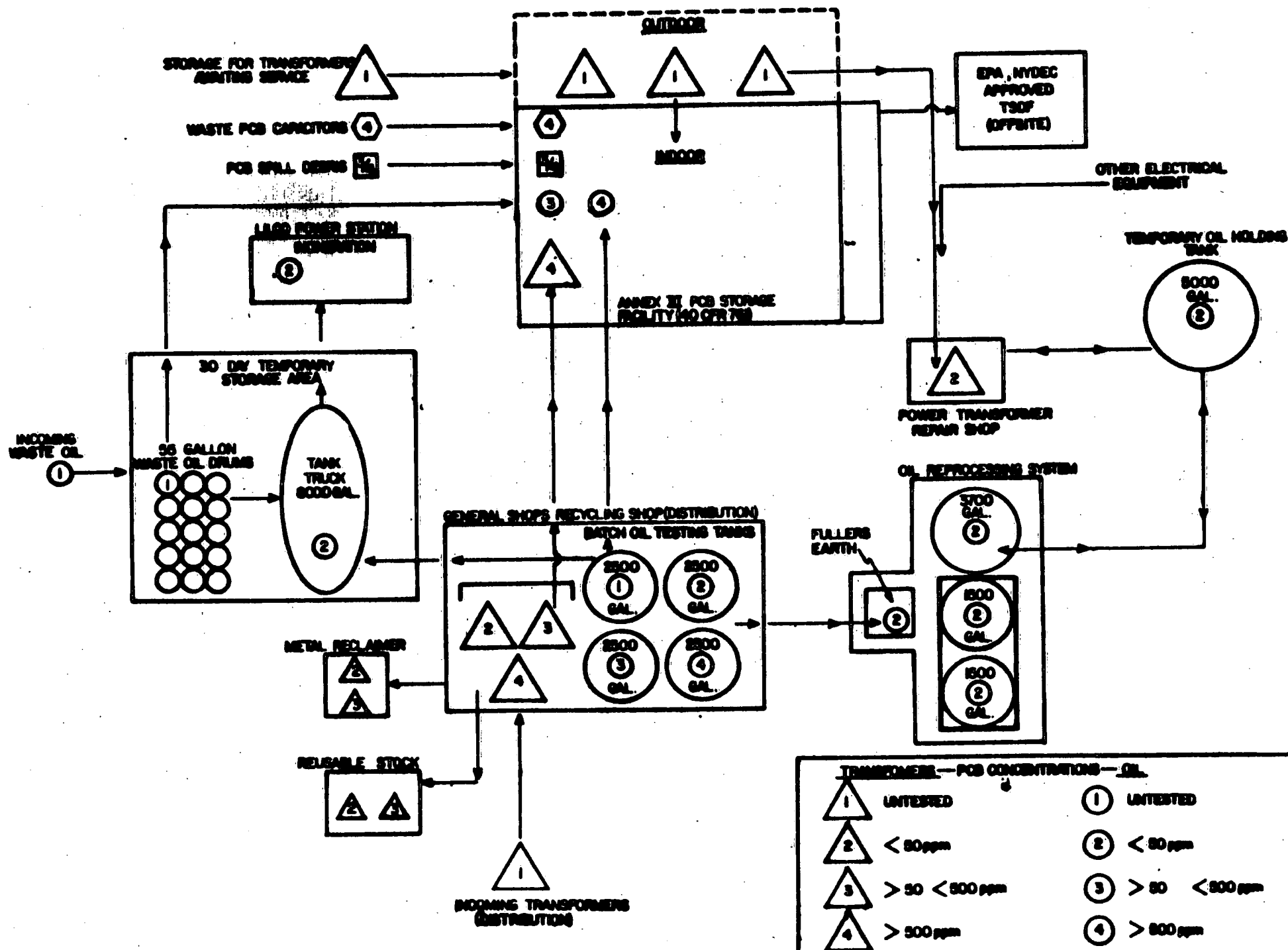
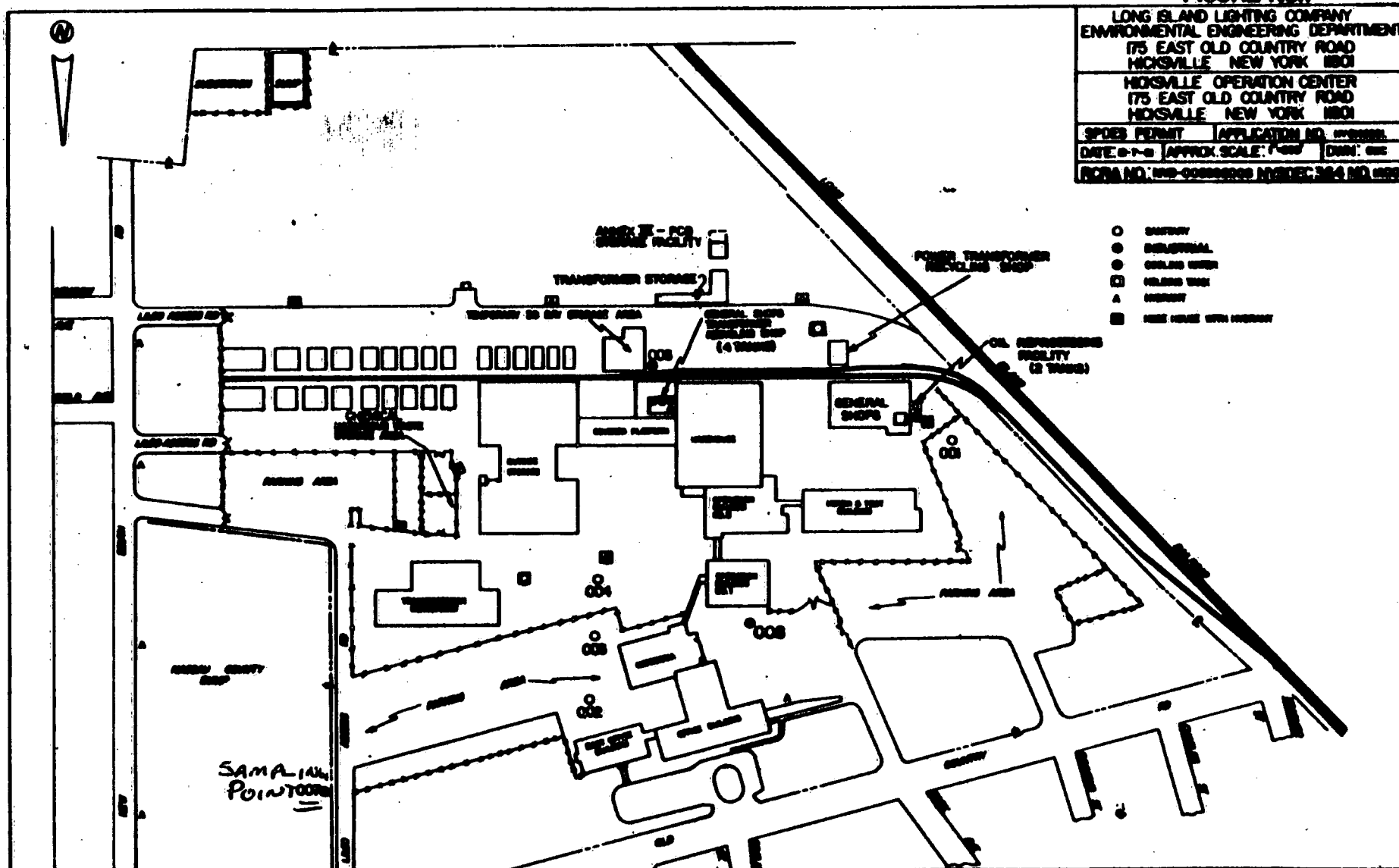


FIGURE NO.1



REFERENCE NO. 15

ATTACHMENTS: GENERAL CONDITIONS (PART II) (8/81),
COMPLIANCE SCHEDULE

Waived

Copies:

SPDES File

Region # 1

NCDHS

Mr. Pulaski - BWFD

Mr. Adamczyk - BWFD

Facility ID No

: NY- 014 0261

Effective Date (EDP)

: October 1, 1982

Expiration Date (ExDP)

: EDP + 5 years

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES)
DISCHARGE PERMIT

Special Conditions
(Part I)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et. seq.) (hereinafter referred to as "the Act").

Permittee Name: Long Island Lighting Company

Permittee Street: 175 East Old Country Road

Permittee City: Hicksville

State: NY

Zip Code: 11801

is authorized to discharge from the facility described below:

Facility Name: Hicksville Operations Center

Facility Location (C,T,V): 175 Old Country Road County: Nassau County

Facility Mailing Address (Street): 175 Old Country Road

Facility Mailing Address (City): Hicksville

State: NY

Zip Code: 11801

into receiving waters known as:

Groundwaters
Class GA
Latitude 40° 36'
Longitude 73° 31'

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal as prescribed by Sections 17-0803 and 17-0804 of the Environmental Conservation Law and Parts 621, 752, and 755 of the Departments' rules and regulations.

By Authority of William L. Garvey, P.E., Chief, Permit Administration Section
Designated Representative of Commissioner of the
Department of Environmental Conservation

8/31/82
Date

[Signature]
Signature

Interim EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning EDP (October 1, 1982)
 and lasting until EDP + 12 months (October 1, 1983)
 the discharges from the permitted facility shall be limited and monitored by the
 permittee as specified below:

<u>Outfall Number & Effluent Parameter</u>	<u>Discharge Limitations</u>		<u>Units</u>	<u>Monitoring Reqmts.</u>	
	<u>Daily Avg.</u>	<u>Daily Max.</u>		<u>Measurement Frequency</u>	<u>Sample Type</u>
001 Sanitary & Wastewater from cleaning operations (cleaning compound) ^a					
Flow*	3500		gpd		
002 Sanitary Flow*	5000		gpd		
003 Sanitary Flow*	20,600		gpd		
004 Sanitary Flow*	29,600		gpd		
005 Sanitary Flow*	1,820		gpd		
005B Oil Water Separator No Discharge					
006 Industrial Washing Sink No Discharge of Degreasers					
007 Boiler Blowdown and Cooling Tower Blowdown					
Flow				Monthly	Instantaneous
Fe**			mg/l	"	"
Cu**			mg/l	"	"
pH**			SU	Weekly	Grab
Dodecyl guanidine Hydrochloride			ppt	2/Month	Grab
Aminotroi (Methylene phosphonic acid)			"	"	"
Isopropanol**			"	"	"

SCHEDULE OF COMPLIANCE FOR EFFLUENT LIMITATIONS

(a) Permittee shall achieve compliance with the effluent limitations specified in this permit for the permitted discharge(s) in accordance with the following schedule:

<u>Action Code</u>	<u>Outfall Number(s)</u>	<u>Compliance Action</u>	<u>Due Date</u>
01	001, 002, 003, 004 & 007	Submit approvable engineering report	EDP + 4 months
02	001, 002, 003, 004 & 007	Submit approvable final plans	EDP + 6 months
09	001, 002, 003 004 & 007	Attain operational level	EDP + 12 months

(b) The permittee shall submit to the Department of Environmental Conservation the required document(s) where a specific action is required in (a) above to be taken by a certain date, and a written notice of compliance or noncompliance with each of the above schedule dates, postmarked no later than 14 days following each elapsed date. Each notice of noncompliance shall include the following information:

1. A short description of the noncompliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirement without further delay;
3. A description of any factors which tend to explain or mitigate the noncompliance; and
4. An estimate of the date permittee will comply with the elapsed schedule requirement and an assessment of the probability that permittee will meet the next scheduled requirement on time.

REFERENCE NO. 16

ENVIRONMENTAL
HEALTH
Continuation Sheet
Nassau County Health Department

Owner or
Agent :
Address:

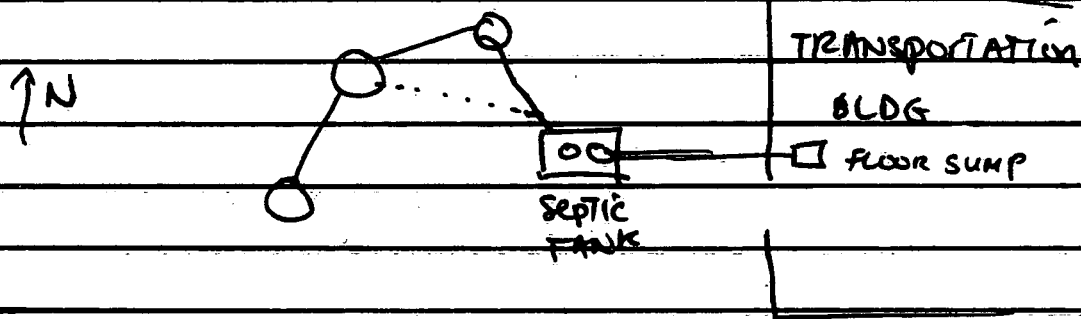
Inspector

DATE

COMMENTS

The inspection revealed that floor drains in The Transportation building discharge to a floor sump prior to exiting the building. The discharge enters a 3000 gallon septic tank & then discharges to a series of 3 leaching pools in succession.

The septic tank was full with a viscous black oil. The 1st leaching pool downstream of the septic tank contained floating oil. The 2nd cesspool could not be inspected due to the presence of a car on the cover. The 3rd leaching pool was receiving a trickle of water. Foam & a sheen of oil were visible on the ~~top~~ water.



Mr. ~~Rob~~ was advised to pump out the septic tank & leaching pools, clean the bottom of the pools of sludge & seal the line to the pools. He agreed to do so.

Mr. Robin was contacted by L-SAMA on 3/5/80 at 4:00 PM advising him that the sample had been collected as he requested.

g. schreder

ENVIRONMENTAL
HEALTH
Continuation Sheet
Nassau County Health Department

Owner or
Agent : LILCO
Address: OLD COUNTRY RD.
HICKSVILLE

Inspector

88-1188-1-10

DATE

COMMENTS

3/17/80 On 3/17/80 at 10:45 AM I met with Bob Teetz, LILCO ENGINEER + INSPECTED THE CLEANUP SITE. Ralph Maccio, RGM, was on site with his employees cleaning out the cesspools of oily water. The interior water was pumped out + the sludge at the bottom was being removed by use of a "supersucker". In addition the interior walls of the pools were hosed clean.

The septic tank will be pumped clean + inspected for leaks. The discharge to the leaching pools will be sealed.

Samples of soil will be obtained along the sides of the pools (block type pool - NOT precast) to determine if oil has contaminated the fill. If so, the contaminated soil will be removed. An inspection by this office will be taken to determine the need to install site wells to groundwater.

J. Schuchman

ENVIRONMENTAL
HEALTH
Continuation Sheet
Nassau County Health Department

Owner or
Agent :

Address: 175 OLD COUNTRY RD.
HICKSVILLE -

Inspector

DATE

COMMENTS

3/18/80

On 3/18/80 at 2:45PM I met with Bob Teetz + inspected the cleanup site. RGM has completed pumping out the pools, removing contaminated soil from the bottoms of the pools and steamed out the line from the building to the septic tank and checked the integrity of the septic tank and sealed the line from the septic tank to the #1 cesspool by placing an expandable plug in the line at the pool.

Core samples of sand removed from the bottom of pools #2 + 3 were visibly clean, odor free with no detectable oil. The soil from the bottom of pool #1 was grey in appearance, oily to the touch + smelled of diesel fuel.

It was agreed that core samples would be taken around pools 2 + 3 to determine if oil had contaminated the surrounding soil. Pool #1 will be demolished + all oil soaked sand removed. This project will begin next week. (3/24 - 3/28).

J. Schechter

REFERENCE NO. 17

APPLICATION FORM "D" FOR A STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) PERMIT (Becomes A SPDES Permit When Signed By Permit Issuing Official)

APPLICATION TYPE <input checked="" type="checkbox"/> New <input type="checkbox"/> Renewal		IF RENEWAL, GIVE PREVIOUS NO. NY-	
APPLICANT'S NAME (Corporate, Partnership or Individual) Long Island Lighting Company		TYPE OF ORGANIZATION <input checked="" type="checkbox"/> Corporate <input type="checkbox"/> Individual <input type="checkbox"/> Partnership <input type="checkbox"/> Public	
APPLICANT'S MAILING ADDRESS (Street, City, State, Zip Code) 75 E. Old Country Road, Hicksville, NY 11801			
FOR ALL CORRESPONDENCE TO: (Name, Title and Address) J. Taktikos, AIA, Senior Architect (Above address)			TELEPHONE NO. (Area Code) 516 733-4332
FACILITY NAME Hicksville Operations Center		FACILITY LOCATION (Street or Road) 175 E. Old Country Rd. Hicksville	
CITY, TOWN OR VILLAGE Hicksville		GIVE EXPLICIT DIRECTIONS TO LOCATION, IF NECESSARY 600' East of Broadway & Old Country Road	
NATURE OF BUSINESS OR TYPE OF FACILITY Electric & Gas Utility-Commercial Office Bldg.		POPULATION SERVED (see instructions) 1200/Day	
FREQUENCY OF DISCHARGE All Year <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If "No", Specify No. of Months		All Week <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "No", Specify No. of Days 5	
DOES YOUR DISCHARGE CONTAIN OR IS IT POSSIBLE FOR YOUR DISCHARGE TO CONTAIN ONE OR MORE OF THE FOLLOWING SUBSTANCES ADDED AS A RESULT OF YOUR OPERATIONS, ACTIVITIES OR PROCESSES? Please Check: <input type="checkbox"/> Aluminum <input type="checkbox"/> Ammonia <input type="checkbox"/> Beryllium <input type="checkbox"/> Cadmium <input type="checkbox"/> Chlorine <input type="checkbox"/> Chromium <input type="checkbox"/> Copper <input type="checkbox"/> Cyanide <input type="checkbox"/> Grease <input type="checkbox"/> Lead <input type="checkbox"/> Mercury <input type="checkbox"/> Nickel <input type="checkbox"/> Oil <input type="checkbox"/> Phenols <input type="checkbox"/> Selenium <input type="checkbox"/> Zinc <input checked="" type="checkbox"/> None of These			
DISCHARGE DATA (Use additional forms, if necessary) (see instructions)			
FALL NO. <input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Replacement <input type="checkbox"/> Existing		TYPE OF WASTE Sanitary & Kitchen Waste	
TYPE OF TREATMENT Grease Trap, Design Flow		Septic Tank-Seepage Pits 5000 GPD	
SURFACE DISCHARGE If "Yes", Name of Receiving Waters		Classification Waters Index No.	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
SURFACE DISCHARGE If "Yes", Name of nearest Surface Water		Distance	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Soil Type Sand & Gravel	
DEPTH TO WATER TABLE		75'	
FALL NO. <input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Replacement <input type="checkbox"/> Existing		TYPE OF WASTE Sanitary	
TYPE OF TREATMENT		Septic Tank & Seepage Pits	
DESIGN FLOW		20,600 GPD	
SURFACE DISCHARGE If "Yes", Name of Receiving Waters		Classification Waters Index No.	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
SURFACE DISCHARGE If "Yes", Name of nearest Surface Water		Distance	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Soil Type Sand & Gravel	
DEPTH TO WATER TABLE		75'	
FALL NO. <input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Replacement <input type="checkbox"/> Existing		TYPE OF WASTE	
TYPE OF TREATMENT		DESIGN FLOW	
SURFACE DISCHARGE If "Yes", Name of Receiving Waters		Classification Waters Index No.	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
SURFACE DISCHARGE If "Yes", Name of nearest Surface Water		Distance	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Soil Type	
DEPTH TO WATER TABLE			

I hereby affirm under penalty of perjury that information provided on this form and any attached supplemental forms is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.43 of the Penal Law.

APPLICANT'S SIGNATURE (See instructions) Date 7/14/76 Printed Name Charles J. Davis Title Vice President

PERMIT VALIDATION SECTION (Department of Environmental Conservation Use Only)

This SPDES permit is issued in compliance with Title 5 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the provisions of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 13, 1972 (33 U.S.C. 1251 et seq.) and related to the Act, and subject to the attached conditions.

APPLICATION NO.
NY- 0136298

EFFECTIVE DATE
December 1, 1976

EXPIRATION DATE
December 1, 1981

ATTACHMENTS:

Other Conditions:

See attached sheet

APPLICATION FORM "C" FOR A STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) PERMIT
INDUSTRIAL OR MINING

1. APPLICANT DATA

APPLICATION TYPE <input checked="" type="checkbox"/> New <input type="checkbox"/> Renewal <input type="checkbox"/> Modification		IF RENEWAL OR MODIFICATION, GIVE PREVIOUS APPLICATION NO., EFFECTIVE DATE, EXPIRATION DATE No. NY- Effective Date Expiration Date	
OWNER'S NAME (Corporate, Partnership or Individual) Long Island Lighting Company		TYPE OF OWNERSHIP <input checked="" type="checkbox"/> Corporate <input type="checkbox"/> Individual <input type="checkbox"/> Partnership <input type="checkbox"/> Public	
OWNER'S MAILING ADDRESS (Street, City, State, Zip Code) 250 Old Country Rd., Mineola New York 11501			
REFER ALL CORRESPONDENCE TO: (Name, Title and Address) Dr. Mathew C. Cordaro, 175 E. Old Country Rd. Hicksville 11801		TELEPHONE NO. (Include Area Code) 516 1733-4384	
FACILITY NAME Hicksville Operating Center		FACILITY LOCATION (Street or Road) 175 E. Old Country Rd.	
COUNTY Nassau	GIVE EXPLICIT DIRECTIONS TO LOCATION, if Necessary		
NATURE OF BUSINESS OR TYPE OF FACILITY Operating Center (Equipment Storage & Maintenance)		NO. OF EMPLOYEES 1,920	NO. OF SHIFTS 3

2. IF ALL YOUR WASTE IS DISCHARGED TO A PUBLICLY OWNED WASTE TREATMENT FACILITY AND/OR A LICENSED WASTE SCAVENGER AND TO THE BEST OF YOUR KNOWLEDGE YOU ARE NOT REQUIRED TO OBTAIN AN SPDES PERMIT, COMPLETE THIS SECTION ONLY, SIGN APPLICATION AND RETURN.

NAME AND ADDRESS OF MUNICIPALITY RESPONSIBLE FOR RECEIVING WASTE AND/OR	NAME AND ADDRESS OF LICENSED WASTE SCAVENGER
	See attached sheets

3. PRODUCTION DATA (Use additional forms, if necessary)

PRINCIPAL TYPES OF PROCESSING DONE AT THIS FACILITY

N/A

PRINCIPAL PRODUCTS AND AMOUNTS PRODUCED PER TIME UNIT	RAW MATERIALS AND AMOUNTS CONSUMED PER TIME UNIT
1. N/A	1. N/A
2.	2.
3.	3.
4.	4.
5.	5.

4. DOES ANY OF YOUR DISCHARGES CONTAIN OR IS IT POSSIBLE FOR ANY DISCHARGE TO CONTAIN ONE OR MORE OF THE FOLLOWING SUBSTANCES ADDED AS A RESULT OF YOUR OPERATIONS, ACTIVITIES OR PROCESSES?

- | | | | | | | | | |
|---|------------------------------------|-----------------------------------|-----------------------------------|------------------------------------|------------------------------------|--|-----------------------------------|-------------------------------|
| <input type="checkbox"/> Aluminum | <input type="checkbox"/> Arsenic | <input type="checkbox"/> Boron | <input type="checkbox"/> Chromium | <input type="checkbox"/> Fluorides | <input type="checkbox"/> Lead | <input type="checkbox"/> Nickel | <input type="checkbox"/> Selenium | <input type="checkbox"/> Tin |
| <input checked="" type="checkbox"/> Ammonia | <input type="checkbox"/> Barium | <input type="checkbox"/> Cadmium | <input type="checkbox"/> Copper | <input type="checkbox"/> Gold | <input type="checkbox"/> Manganese | <input checked="" type="checkbox"/> Oil & Grease | <input type="checkbox"/> Silver | <input type="checkbox"/> Zinc |
| <input type="checkbox"/> Antimony | <input type="checkbox"/> Beryllium | <input type="checkbox"/> Chlorine | <input type="checkbox"/> Cyanide | <input type="checkbox"/> Iron | <input type="checkbox"/> Mercury | <input type="checkbox"/> Phenols | <input type="checkbox"/> Sulfides | |
- ☒ Corrosion control chemicals (specify) See attached sheets
- ☒ Halogenated organics or halogenated hydrocarbons (e.g. chlorinated, fluorinated or brominated) (specify) trichloroethane
- ☐ Herbicides or pesticides (specify) _____
- ☐ Radioactivity (specify) _____
- ☐ Slimicides, biocides or algacides (specify) _____
- ☐ Substituted aromatics (e.g. derivatives of benzene, pyridene, biphenyl, naphthalene, coal or petroleum tar, etc.) (specify) _____
- ☒ Surfactants (specify) _____
- ☐ None of the above

Specify the trade names and manufacturer of any chemicals used at this facility which are not listed above and whose specific constituents are not known to you. See attached sheets

Explanation of above: (Attach additional sheets, if necessary)

5. SLUDGE DISPOSAL If sludge is created as a result of processing or treatment, what is ultimate disposal?

N/A

6. DISCHARGE DATA (Continued) (See Instructions) ATTACH SKETCH SHOWING OUTFALL LOCATIONS

OUTFALL NO. 001	<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Existing	<input type="checkbox"/> Replacement <input type="checkbox"/> Expansion	TYPE OF WASTE Sanitary	TYPE OF TREATMENT (If none, so state) Septic Tank/Leaching Field
DESIGN FLOW 12,000	Gal/Day	ACTUAL FLOW Unknown	Gal/Day	FREQUENCY OF DISCHARGE <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Batch
PERIOD OF DISCHARGE 12		Months per year		7 Days per week
				24 Hours per day

SURFACE DISCHARGE <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
SUBSURFACE DISCHARGE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", Name of nearest Surface Water South Oyster Bay	Distance 42,000 ft.	SOIL TYPE Sand/Gravel
			Depth to Water Table 69 ft.

OUTFALL NO. 002	<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Existing	<input type="checkbox"/> Replacement <input type="checkbox"/> Expansion	TYPE OF WASTE Sanitary	TYPE OF TREATMENT (If none, so state) Septic Tank/Leaching Field
DESIGN FLOW 6,000	Gal/Day	ACTUAL FLOW Unknown	Gal/Day	FREQUENCY OF DISCHARGE <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Batch
PERIOD OF DISCHARGE 12		Months per year		7 Days per week
				24 Hours per day

SURFACE DISCHARGE <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
SUBSURFACE DISCHARGE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", Name of nearest Surface Water South Oyster Bay	Distance 42,000 ft.	SOIL TYPE Sand/Gravel
			Depth to Water Table 69 ft.

OUTFALL NO. 003	<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Existing	<input type="checkbox"/> Replacement <input type="checkbox"/> Expansion	TYPE OF WASTE Sanitary	TYPE OF TREATMENT (If none, so state) Septic Tank/Leaching Field
DESIGN FLOW 22,000	Gal/Day	ACTUAL FLOW Unknown	Gal/Day	FREQUENCY OF DISCHARGE <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Batch
PERIOD OF DISCHARGE 12		Months per year		7 Days per week
				24 Hours per day

SURFACE DISCHARGE <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
SUBSURFACE DISCHARGE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", Name of nearest Surface Water South Oyster Bay	Distance 42,000 ft.	SOIL TYPE Sand/Gravel
			Depth to Water Table 69 ft.

OUTFALL NO. 004	<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Existing	<input type="checkbox"/> Replacement <input type="checkbox"/> Expansion	TYPE OF WASTE Sanitary	TYPE OF TREATMENT (If none, so state) Septic Tank/Leaching Field
DESIGN FLOW 34,000	Gal/Day	ACTUAL FLOW Unknown	Gal/Day	FREQUENCY OF DISCHARGE <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Batch
PERIOD OF DISCHARGE 12		Months per year		7 Days per week
				24 Hours per day

SURFACE DISCHARGE <input type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", Name of Receiving Waters	Classification	Waters Index No.
SUBSURFACE DISCHARGE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If "Yes", Name of nearest Surface Water South Oyster Bay	Distance 42,000 ft.	SOIL TYPE Sand/Gravel
			Depth to Water Table 69 ft.

7. COMMENTS:

8. I hereby affirm under penalty of perjury that information provided on this form and any attached supplemental forms is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

APPLICANT'S SIGNATURE (See Instructions)	Date	Printed Name	Title
<i>Charles J. Davis</i>	4/5/78	Charles J. Davis	Sr. Vice President

SLUDGE DISPOSAL If sludge is created as a result of processing or treatment, what is ultimate disposal?

N/A

DISCHARGE DATA (Continued) (See Instructions) ATTACH SKETCH SHOWING OUTFALL LOCATIONS

OUTFALL NO. 005	<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Existing	<input type="checkbox"/> Replacement <input type="checkbox"/> Expansion	TYPE OF WASTE Sanitary/Industrial	TYPE OF TREATMENT (if none, so state) leaching oil trap septic tank, field
DESIGN FLOW 2,400	Gal/Day	ACTUAL FLOW Unknown	Gal/Day	FREQUENCY OF DISCHARGE <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Batch
PERIOD OF DISCHARGE 12		Months per year		7 Days per week
24		Hours per day		IS FLOW EQUALIZATION PROVIDED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes", describe in comments
SURFACE DISCHARGE <input type="checkbox"/> Yes <input type="checkbox"/> No		If "Yes", Name of Receiving Waters		Classification, Waters Index No.
SUBSURFACE DISCHARGE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		If "Yes", Name of nearest Surface Water South Oyster Bay		Distance 42,000 Ft.
		SOIL TYPE Sand/Gravel		Depth to Water Table 69
OUTFALL NO. 006	<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Existing	<input type="checkbox"/> Replacement <input type="checkbox"/> Expansion	TYPE OF WASTE	TYPE OF TREATMENT (if none, so state) Leaching Field
DESIGN FLOW Unknown	Gal/Day	ACTUAL FLOW Unknown	Gal/Day	FREQUENCY OF DISCHARGE <input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent <input type="checkbox"/> Batch
PERIOD OF DISCHARGE 12		Months per year		7 Days per week
24		Hours per day		IS FLOW EQUALIZATION PROVIDED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "Yes", describe in comments
SURFACE DISCHARGE <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		If "Yes", Name of Receiving Waters		Classification, Waters Index No.
SUBSURFACE DISCHARGE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		If "Yes", Name of nearest Surface Water South Oyster Bay		Distance 42,000 Ft.
		SOIL TYPE Sand/Gravel		Depth to Water Table 69
OUTFALL NO.	<input type="checkbox"/> Proposed <input type="checkbox"/> Existing	<input type="checkbox"/> Replacement <input type="checkbox"/> Expansion	TYPE OF WASTE	TYPE OF TREATMENT (if none, so state)
DESIGN FLOW	Gal/Day	ACTUAL FLOW	Gal/Day	FREQUENCY OF DISCHARGE <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Batch
PERIOD OF DISCHARGE		Months per year		Days per week
				Hours per day
SURFACE DISCHARGE <input type="checkbox"/> Yes <input type="checkbox"/> No		If "Yes", Name of Receiving Waters		Classification, Waters Index No.
SUBSURFACE DISCHARGE <input type="checkbox"/> Yes <input type="checkbox"/> No		If "Yes", Name of nearest Surface Water		Distance Ft.
		SOIL TYPE		Depth to Water Table
OUTFALL NO.	<input type="checkbox"/> Proposed <input type="checkbox"/> Existing	<input type="checkbox"/> Replacement <input type="checkbox"/> Expansion	TYPE OF WASTE	TYPE OF TREATMENT (if none, so state)
DESIGN FLOW	Gal/Day	ACTUAL FLOW	Gal/Day	FREQUENCY OF DISCHARGE <input type="checkbox"/> Continuous <input type="checkbox"/> Intermittent <input type="checkbox"/> Batch
PERIOD OF DISCHARGE		Months per year		Days per week
				Hours per day
SURFACE DISCHARGE <input type="checkbox"/> Yes <input type="checkbox"/> No		If "Yes", Name of Receiving Waters		Classification, Waters Index No.
SUBSURFACE DISCHARGE <input type="checkbox"/> Yes <input type="checkbox"/> No		If "Yes", Name of nearest Surface Water		Distance Ft.
		SOIL TYPE		Depth to Water Table

COMMENTS:

It is currently anticipated that all waste will be discharged to the Nassau County Sewage Collection System during 1979.

I hereby affirm under penalty of perjury that information provided on this form and any attached supplemental forms is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

APPLICANT'S SIGNATURE (See Instructions) *Charles J. Davis* Date 4/5/78 Printed Name Charles J. Davis Title Sr. Vice President

Additional Information

This application is for six existing subsurface discharges at LILCO's Hicksville Operating Center. To the best of our knowledge the discharges are generally sanitary in nature and contain varying amounts of common cleaning agents. Storm water run off is routed to a Nassau County basin on the corner of Old Country and New South Roads.

The average daily water usage at this location is approximately 105,000 gallons. Although some of this water is used for lawn watering and other uses which result in evaporation, the total flow can be arbitrarily proportioned among the six discharge locations. No flow measurements or actual chemical analyses have been made. The quantities of normal cleaning (janitorial) compounds used at this site cannot be assigned to any particular discharge and are listed after discharge 006.

Discharge 001

Consists of sanitary and floor drainage from the Meter & Test and General Shops buildings.

The following soap is discharged to the ground through 001.

Jano Stad

600 lbs/year

Other chemicals used at this location are removed by scavenger.

Discharge 002

Consists of sanitary discharges and other discharges associated with food processing and routine building maintenance from the cafeteria. The system is fitted with a grease trap.

Discharge 003

Consists of sanitary discharges and discharges due to routine building maintenance activities from two office buildings.

Discharge 004

Consists of sanitary discharges and discharges due to routine building maintenance activities from the salvage shop, warehouse and operation buildings 1 and 2.

Other chemicals used at this location are removed by scavenger.

Discharge 005

Consists of floor drains and sanitary discharges from the Transportation building.

The following chemicals may be discharged at this location:

<u>Chemical</u>	<u>Gallons/Year</u>
Turbo-clean	660

Approximately 990 gallons of trichloroethane is used at this location as a solvent for cleaning hydraulic booms on utility bucket trucks. It is believed that most of this solvent is retained inside the trucks, evaporates to the atmosphere and little is discharged to the ground.

Other chemicals at this location are removed by scavengers.

Discharge 006

Consists of drainage from a sink used to wash rubber goods.

The following chemical may be discharged at this location:

Quick Off	100 lbs/yr.
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In addition, the following chemicals are used for routine building maintenance and are discharged through the six discharge locations.

<u>Chemical</u>	<u>Quantities/Yr.</u>
007 - Disodium phosphate (boiler water treatment)	200 lbs.
007 - Trisodium phosphate (boiler water treatment)	200 lbs.
" Sodium hydroxide (boiler water treatment)	200 lbs.
" Sodium silicate (boiler water treatment)	200 lbs.
? Calgon CB-769 (corrosion inhibitor)	125 gal.
? Calgon HD 1339 (air conditioning treatment)	125 gal.
Astor Co. Formula 26 (floor cleaner)	1,155 gal.
Latherator West Co. (hand soap)	375 gal.
Vanisol (bowl cleaner)	150 gal.
Spal Huntington Co. (cleaner)	380 gal.
Kelite Allied Chemical (cleaner)	275 gal.
Wintocide Astor Co. (disinfectant)	280 gal.
Trichloroethane (solvent)	52 gal.
X-Ray Film Developer	27 gal.

APPLICATION FORM "D" FOR A STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) PERMIT
(Becomes A SPDES Permit When Signed By Permit Issuing Official)

APPLICATION TYPE <input checked="" type="checkbox"/> New <input type="checkbox"/> Renewal		IF RENEWAL, GIVE PREVIOUS NO. NY-	
OWNER'S NAME (Corporate, Partnership or Individual) Long Island Lighting Company		TYPE OF OWNERSHIP <input checked="" type="checkbox"/> Corporate <input type="checkbox"/> Individual <input type="checkbox"/> Partnership <input type="checkbox"/> P.	
OWNER'S MAILING ADDRESS (Street, City, State, Zip Code) 175 E. Old Country Road, Hicksville, NY 11801			
REFER ALL CORRESPONDENCE TO: (Name, Title and Address) P. Taltikos, AIA, Senior Architect (above address)			TELEPHONE NO. (Include Area Code) 516 733-4332
FACILITY NAME Hicksville Operations Center		FACILITY LOCATION (Street or Road) 175 E. Old Country Rd. Hicksville	
COUNTY Nassau	GIVE EXPLICIT DIRECTIONS TO LOCATION, IF NECESSARY 600' East of Broadway & Old Country Road		
NATURE OF BUSINESS OR TYPE OF FACILITY Electric & Gas Utility-Commercial Office Bldg.			POPULATION SERVED (See Instructions) 1200/Day
FREQUENCY OF DISCHARGE All Year? <input type="checkbox"/> Yes <input type="checkbox"/> No If "No", Specify No. of Months _____ All Week? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If "No", Specify No. of Days _____ 5			
DOES YOUR DISCHARGE CONTAIN OR IS IT POSSIBLE FOR YOUR DISCHARGE TO CONTAIN ONE OR MORE OF THE FOLLOWING SUBSTANCES ADDED AS A RESULT OF YOUR OPERATIONS, ACTIVITIES OR PROCESSES? Please Check: <input type="checkbox"/> Aluminum <input type="checkbox"/> Ammonia <input type="checkbox"/> Beryllium <input type="checkbox"/> Cadmium <input type="checkbox"/> Chlorine <input type="checkbox"/> Chromium <input type="checkbox"/> Copper <input type="checkbox"/> Cyanide <input type="checkbox"/> Grease <input type="checkbox"/> Lead <input type="checkbox"/> Mercury <input type="checkbox"/> Nickel <input type="checkbox"/> Oil <input type="checkbox"/> Phenols <input type="checkbox"/> Selenium <input type="checkbox"/> Zinc <input checked="" type="checkbox"/> None of These			
DISCHARGE DATA (Use additional forms, if necessary) (See Instructions)			
OUTFALL NO. 1	<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Replacement <input type="checkbox"/> Existing <input type="checkbox"/> Expansion	TYPE OF WASTE Sanitary & Kitchen Waste	TYPE OF TREATMENT Grease Trap, Septic Tank-Seepage Pits
SURFACE DISCHARGE <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		DESIGN FLOW 5000 Gal	
SUBSURFACE DISCHARGE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		SOIL TYPE Sand & Gravel	
OUTFALL NO. 2	<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Replacement <input type="checkbox"/> Existing <input type="checkbox"/> Expansion	TYPE OF WASTE Sanitary	TYPE OF TREATMENT Septic Tank & Seepage Pits
SURFACE DISCHARGE <input type="checkbox"/> Yes <input type="checkbox"/> No		DESIGN FLOW 20,600 Gal	
SUBSURFACE DISCHARGE <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		SOIL TYPE Sand & Gravel	
OUTFALL NO.	<input type="checkbox"/> Proposed <input type="checkbox"/> Replacement <input type="checkbox"/> Existing <input type="checkbox"/> Expansion	TYPE OF WASTE	TYPE OF TREATMENT
SURFACE DISCHARGE <input type="checkbox"/> Yes <input type="checkbox"/> No		DESIGN FLOW	
SUBSURFACE DISCHARGE <input type="checkbox"/> Yes <input type="checkbox"/> No		SOIL TYPE	

I hereby affirm under penalty of perjury that information provided on this form and any attached supplemental forms is true to the best of my knowledge and belief. False statements made hereon are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

APPLICANT'S SIGNATURE (See Instructions) *Charles J. Davis* Date *7/14/76* Printed Name *Charles J. Davis* Title *Vice President*

PERMIT VALIDATION SECTION

(Department of Environmental Conservation Use Only)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the provisions of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P.L. 92-500, October 18, 1972 (33 U.S.C. §1251 et. seq.) (hereinafter referred to as "the Act"), and subject to the attached conditions.

APPLICATION NO.

NY- 0136298

EFFECTIVE DATE

December 1, 1976

EXPIRATION DATE

December 1, 1977

ATTACHMENTS:

Other Conditions:

See attached Sheet

Signature of Permit Issuing Official

Date

CARD 1	Type 1	1000	SIC Code 70	# Out Falls 73	Dis Class 76	CARD 3	Region 71	County 72	Major Basin 74	Sub Basin 76	Compact Area 78	CARD 6	Latitude 53	Longitude 58 59	CARD 7	57
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REFERENCE NO. 18

SIGNIFICANT HABITAT OVERLAY NO. 1 OF
 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 DIVISION OF FISH AND WILDLIFE
 BUREAU OF WILDLIFE

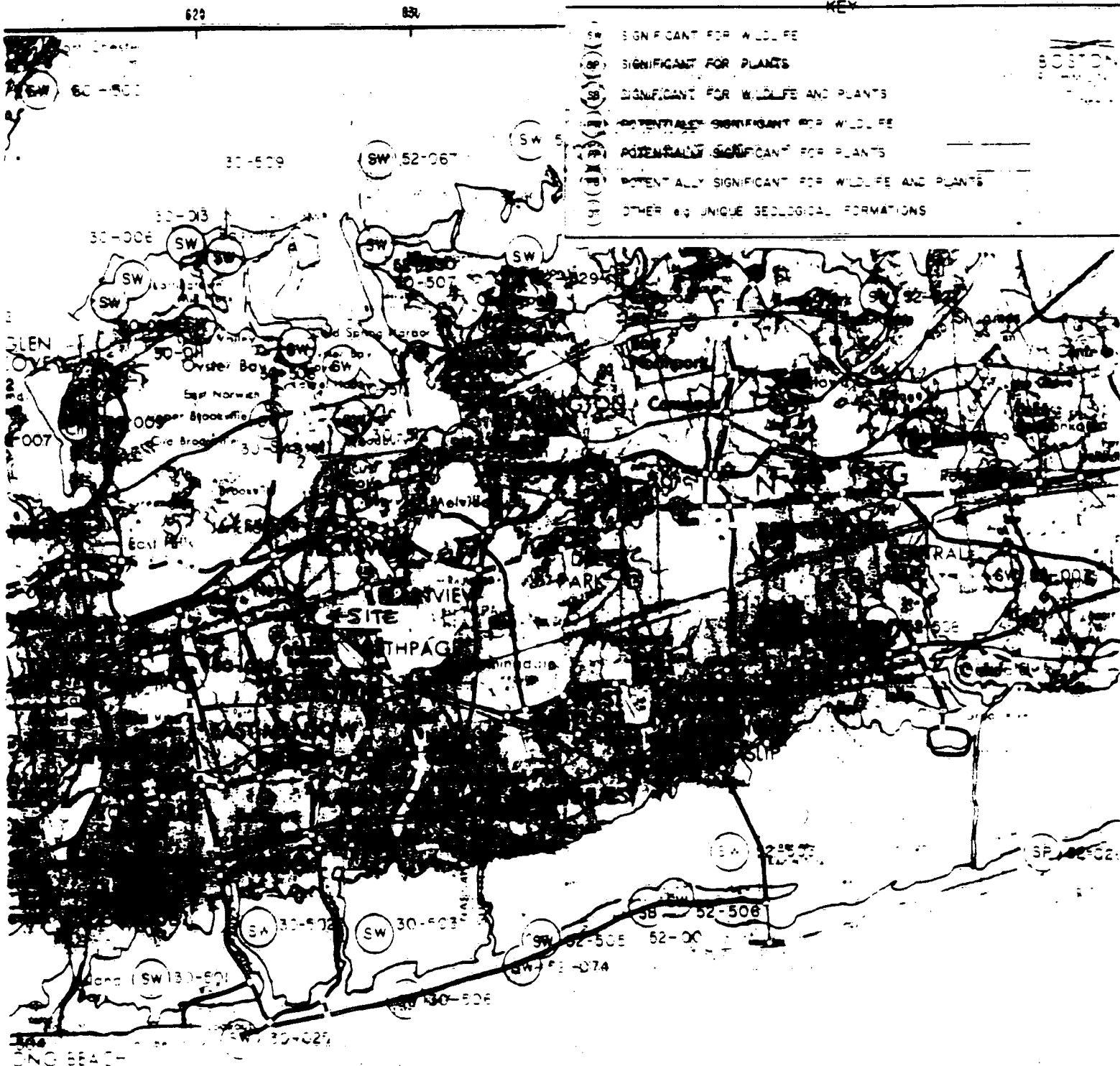


PREPARED FOR SIGNIFICANT HABITAT UNIT
 WILDLIFE RESOURCES CENTER
 DELMAR, NEW YORK 12054
 518-457-5782
 PREPARED BY HABITAT INVENTORY UNIT

QUAD NEW 44
 SCALE 1:250,000
 MAP 1
 REVISED

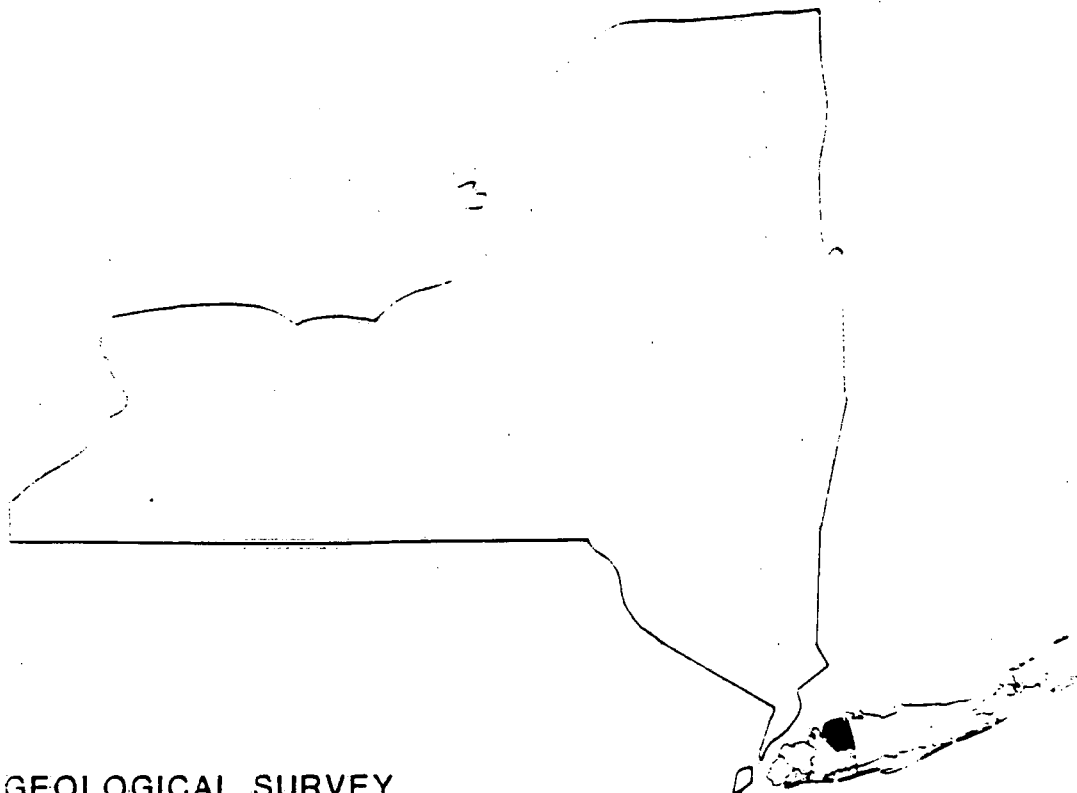
KEY

- (SW) SIGNIFICANT FOR WILDLIFE
- (SP) SIGNIFICANT FOR PLANTS
- (SB) SIGNIFICANT FOR WILDLIFE AND PLANTS
- (S) POTENTIALLY SIGNIFICANT FOR WILDLIFE
- (P) POTENTIALLY SIGNIFICANT FOR PLANTS
- (S/P) POTENTIALLY SIGNIFICANT FOR WILDLIFE AND PLANTS
- (U) OTHER OR UNIQUE GEOLOGICAL FORMATIONS



REFERENCE NO. 19

Hydrogeology and Ground-Water Quality of the Northern Part of the Town of Oyster Bay, Nassau County, New York. in 1980



U.S. GEOLOGICAL SURVEY
Water-Resources Investigations
Report 85-4051

Prepared in cooperation with
NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS



HYDROGEOLOGY AND GROUND-WATER QUALITY OF THE
NORTHERN PART OF THE TOWN OF OYSTER BAY,
NASSAU COUNTY, NEW YORK, IN 1980

By Chabot Kilburn and Richard K. Krulik

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations
Report 85-4051

Prepared in cooperation with the
NASSAU COUNTY DEPARTMENT OF PUBLIC WORKS



Syosset, New York

1987

HYDROGEOLOGY

The ground-water reservoir underlying the northern part of the Town of Oyster Bay consists of unconsolidated glacial deposits of Pleistocene age and coastal-plain deposits of continental and marine origin of Late Cretaceous age. These unconsolidated deposits consist of gravel, sand, silt, and clay and are underlain by bedrock of early Paleozoic and (or) Precambrian age. The bedrock, which is relatively impermeable, forms the base of the ground-water reservoir.

The thickness, character, and water-bearing properties of the aquifer and the relationships between hydrogeologic and geologic units underlying the study area are depicted in table 1. The correlations should be considered direct relationships as implied in the tables. The upper and lower boundaries of the hydrogeologic units are determined mainly from gross lithologic differences between units rather than the age of the deposits, which forms the basis for geologic correlations. For example, the upper and lower limits of the confining units (Port Washington confining unit and Raritan clay) are placed at intervals where the lithologic sequence changes from predominantly clay to sand or sand and gravel, and these positions may have no time-stratigraphic significance. For this reason, and because differentiation between sediments of Pleistocene and Cretaceous age is difficult and uncertain, it is possible that some deposits of Pleistocene age have been included in the upper part of the Magothy aquifer, which, by present definition, is approximately equivalent to the Magothy Formation-Matawan Group, undifferentiated, of Late Cretaceous age. The three hydrogeologic sections (pl. 1B) show the inferred extent, lateral and vertical relationships, and the variations in depth, thickness, lithology, and structure of these units.

Description of Hydrogeologic Units

Bedrock

Bedrock of early Paleozoic and (or) Precambrian age underlies all of western Long Island (Fisher and others, 1962). The bedrock generally consists of metamorphic and igneous crystalline rocks--schist, gneiss, and granite--and lies at depths ranging from about 350 ft below sea level along the north shore to about 950 ft below sea level in the southeast part of the study area (pl. 2A, and hydrogeologic sections, pl. 1B).

Bedrock is generally regarded as the base of the ground-water reservoir on Long Island because of its density and low permeability. No wells in the Town of Oyster Bay are known to obtain water from bedrock.

Lloyd Aquifer

The Lloyd aquifer is the equivalent of the Lloyd Sand Member of the Raritan Formation of Late Cretaceous age (Cohen and others, 1968, p. 18). It consists of discontinuous layers of gravel, sand, sandy clay, silt, and clay, and lies roughly parallel to the bedrock surface at depths ranging from about

Table 1.--Summary of geology and water-bearing properties of deposits underlying the northern part of Town of Oyster Bay, Nassau County, New York.

[Modified from Swarzenski (1963) and Isbister (1966)]

System	Series	Geologic unit	Hydrogeologic unit	Approximate range in thickness (feet)	Character of deposits forming geologic unit (modified from Swarzenski, 1963, and Isbister, 1966)	Water-bearing properties
QUATERNARY	Holocene	Undifferentiated artificial fill, salt-marsh and swamp deposits, stream alluvium, and shore deposits		0 - 50	Sand, gravel, silt, and clay; organic mud, peat, loam, and shells. Colors are gray, green, black, and brown.	Permeable zones near the shore and in stream valleys may yield small quantities of fresh or brackish water at shallow depths. Clay and silt beneath the north-shore harbors retard saltwater encroachment and confine underlying aquifers.
	Pleistocene	Upper Pleistocene deposits	Upper glacial aquifer	10 - 380	Till, composed of unsorted clay, sand, gravel, and boulders. Outwash deposits of stratified brown sand and gravel. May also contain some lacustrine and marine deposits consisting of clay, silt, and sand; locally fossiliferous.	Till, relatively impermeable, may cause local conditions of perched water and impede downward percolation of precipitation. Outwash deposits of sand and gravel are highly permeable. Wells screened in glacial outwash deposits yield as much as 1,750 gal/min. Specific capacities of large-capacity wells range from 14 to 175 (gal/min)/ft of drawdown. Water is generally fresh and unconfined but may locally contain saltwater near shores.
Unconformity						
CRETACEOUS - QUATERNARY	Upper Cretaceous, Pleistocene, and Holocene(?)	Deposits of Holocene(?) and Pleistocene age, undifferentiated. May locally include eroded remnants of the clay member of the Raritan Formation.	Port Washington confining unit	0 - 360	Clay, solid and silty, gray, gray-green, white, red, mottled, and brown, containing lenses or layers of sand or sand and gravel. May locally contain lignite, shells, foraminifera, and other micro-fossils.	Relatively impermeable throughout much of the area. May be moderately to highly(?) permeable in areas adjacent to inferred limit of Magothy aquifer where sand and sand and gravel content may be large. Confining water in underlying Port Washington and Lloyd aquifers but does not prevent movement of water between upper glacial aquifer and Port Washington aquifer. Lenses of sand and sand and gravel provide sources of water supply and may permit local interchange of water with adjacent formations. One large-capacity well had a reported yield of 2,000 gal/min with a specific capacity of 43 (gal/min)/ft of drawdown. Coarser deposits may locally contain saltwater near shores.
		Deposits of Pleistocene age, undifferentiated, and (or) local erosional remnants of the Lloyd Sand Member of the Raritan Formation.	Port Washington aquifer	0 - 170	Sand, fine to coarse, white, yellow, gray, and brown, or gray and gravel with inter-bedded clay, silt, and sandy clay.	Moderately to highly(?) permeable. One large-capacity well had a reported yield of 1,100 gal/min with a specific capacity of 11 (gal/min)/ft of drawdown. Water is confined under artesian pressure. Generally contains freshwater but may have high iron content.

CRETACEOUS	Upper Cretaceous	Unconformity					
		Matawan Group Magothy Formation- undifferentiated		Magothy aquifer	0 - 610	Clay, silt, sandy clay, and sand, fine to medium, clayey, white, gray, yellow, pink, and multicolored, in lenticular beds. May contain lenticular beds of coarse sand and gravel in lower part of unit. Lignite, pyrite, and iron oxide concretions may occur throughout the unit.	Moderately to highly permeable. Wells screened in lower part of aquifer yield as much as 1,400 gal/min. Specific capacities of large-capacity wells commonly range from 10 to 50 (gal/min)/ft of drawdown but may be as high as 80 (gal/min)/ft. Aquifer is principal source for public supply. Water is generally of excellent quality. Degree of confinement under artesian pressure is variable; however, artesian conditions increase with depth. Hydraulic continuity may exist between the Magothy aquifer and contiguous Pleistocene aquifers.
		Unconformity					
		Raritan Formation	Clay member	Raritan clay confining unit	0 - 185	Clay, solid and silty, gray, white, red, and mottled. May contain lenses or layers of fine to medium sand which may locally contain gravel. Sand layers frequently occur near top of unit. Lignite and pyrite are common.	Relatively impermeable. Confines water in underlying Lloyd aquifer but does not prevent movement of water between Magothy and Lloyd aquifers.
			Lloyd Sand Member	Lloyd aquifer	0 - 195	Sand, fine to coarse, white, yellow, or gray, and gravel, commonly in a clayey matrix. Contains lenses and layers of solid or silty clay. Beds are usually lenticular and frequently show great lateral changes in composition.	Moderately permeable. Large-capacity wells may yield as much as 1,600 gal/min; specific capacities commonly range from 10 to 19 (gal/min)/ft of drawdown. Water is confined under artesian pressure; some wells flow. Water is generally of excellent quality but may have high iron content.
		Unconformity					
		Crystalline rocks	Bedrock		Not known	Metamorphic and igneous rocks; muscovite-biotite schist, gneiss, and granite(?). May have weathered zone at top.	Relatively impermeable. Contains some water in fractures, but impracticable to develop owing to low permeability.

200 ft below sea level along the north shore to about 700 ft below sea level in the southeast part of the study area (pl. 2B). Its thickness ranges from 0 to 250 ft from northwest to southeast, respectively.

The Lloyd aquifer is a major aquifer in the Town of Oyster Bay. It is probably hydraulically continuous with the adjacent Port Washington aquifer and upper glacial aquifer in the northern part of the study area. Water in the Lloyd aquifer is confined under artesian pressure beneath the Raritan clay.

Well yields during test pumping of large-capacity public-supply wells screened in the Lloyd aquifer have ranged from 500 gal/min to as much as 1600 gal/min.

Raritan Clay

The Raritan clay is a distinct hydrogeologic unit that extends throughout much of the Town of Oyster Bay (pl. 3A). In this area, the Raritan clay may be equivalent to the unnamed clay member of the Raritan Formation of Late Cretaceous age. The Raritan clay consists mainly of light to dark gray, red, white, or yellow clay and variable amounts of silt, and clayey silty fine sand. Sandy beds of varying thickness are common. The top of the Raritan clay is roughly parallel to that of the underlying Lloyd sand member. The upper-surface altitude of the Raritan clay ranges from 150 ft below sea level along the north shore to about 550 ft below sea level in the southeastern part of the study area. Its thickness ranges from 0 to 200 ft from northwest to southeast, respectively.

The Raritan clay is a significant hydrogeologic unit because it confines water in the underlying Lloyd aquifer. Although its hydraulic conductivity is very low, it does not entirely prevent movement of water between the Magothy and Lloyd aquifers. Some public-supply and other wells obtain part of their water supply from the sandy zones in the upper part of the Raritan clay.

Magothy Aquifer

The Magothy aquifer is the equivalent of the Matawan Group-Magothy Formation undifferentiated of upper Cretaceous age. Deposits in this unit consist of beds and lenses of light-gray, fine to coarse sand with some interstitial clay. Detailed lithologic descriptions are given in Soren (1978); Ku and others (1975); and Jensen and Soren (1974).

The top of the Magothy aquifer is not planar, unlike the surfaces of the underlying units. The Magothy surface was deeply eroded during Tertiary time and probably was considerably eroded in Pleistocene time. The upper surface altitude of the Magothy ranges from as high as 200 ft above sea level in the center of the study area to 200 ft below sea level along the northeast edge of the study area (pl. 3B). Its thickness ranges from 0 to 650 ft from northwest to southeast, respectively.

The Magothy aquifer is the principal aquifer underlying Long Island and is the island's main source of water for public supply. The sand beds within the aquifer are moderately to highly permeable. The reported yields during

pumping tests of several public-supply wells screened in the Magothy aquifer in the Town of Oyster Bay ranged from 300 gal/min to as much as 1,500 gal/min. The average yield was about 1,000 gal/min.

The large amount of clay in the upper half of the aquifer causes the water to become increasingly confined with depth. Along the north shore, the Magothy aquifer is probably in hydraulic continuity with the adjacent Port Washington aquifer. The Magothy also has a generally high degree of hydraulic continuity with the overlying upper glacial aquifer, but the degree of continuity may vary considerably from place to place.

Port Washington Aquifer

Two previously unrecognized hydrogeologic units in the northern part of the Town of Oyster Bay are defined as the Port Washington aquifer and Port Washington confining unit. The units were first recognized in the northern part of the Town of North Hempstead (Kilburn, 1979). The inferred limits of the units are shown in plates 4A and 4B, and their relationships to the other hydrologic units are shown on the hydrogeologic sections on plate 1B.

The Port Washington aquifer is a sequence of deposits of Pleistocene and (or) Late Cretaceous age that underlie the north-shore area of the Town of Oyster Bay. The deposits form a distinct hydrogeologic unit that rests upon bedrock and is overlain by a thick sequence of confining clay. The south edge of the deposits overlap and abut the adjacent Cretaceous units. The sediments of the Port Washington aquifer form part of the valley fill in the channels cut into the Cretaceous deposits. These deposits consist largely of sand or sand and gravel and varying amounts of interbedded clay, silt, and sandy clay.

The altitude of the top of the Port Washington aquifer ranges from 150 ft below sea level along the north shore to 450 ft below sea level along the south shore (pl. 4A). Its thickness ranges from 0 to more than 150 ft in the central parts of the study area.

The Port Washington aquifer is moderately to highly permeable and is a major aquifer in the northern parts of the Town of Oyster Bay. The reported yields during pumping tests of public-supply wells screened in the aquifer range from 300 gal/min to 1,200 gal/min. Water in the aquifer is confined beneath the Port Washington confining unit. The hydrogeologic relationships between the Port Washington aquifer and the abutting Lloyd, Magothy, and upper glacial aquifers, as shown in the hydrogeologic sections on plate 1B, suggest that these deposits could be in lateral hydraulic continuity. Potentiometric studies of the head in the Lloyd aquifer made by Swarzenski (1963), Kimmel (1973), and Kilburn (1979) tend to verify a lateral hydraulic continuity between the Port Washington and Lloyd aquifers.

Port Washington Confining Unit

The Port Washington confining unit is a sequence of deposits of Pleistocene or Late Cretaceous to Holocene(?) age that locally underlies the north shore. The unit consists mainly of clay and silt, with scattered lenses

of sand or sand and gravel. (See Kilburn, 1979, for a more detailed description.) The deposits that form the Port Washington confining unit overlie the Port Washington aquifer or overlap the adjacent Cretaceous units and may form part of the valley fill that occupies channels cut into the other Cretaceous deposits. The unit may locally include or consist of erosional remnants of the clay member of the Raritan Formation.

The altitude of the top of the Port Washington confining unit ranges from 100 ft above sea level in the central part of the study area to 300 ft below sea level along the northeastern part (pl. 4B). Its thickness ranges from 0 to more than 150 ft in the central part of the study area.

Upper Glacial Aquifer

The upper glacial aquifer consists of deposits of late Pleistocene and Holocene age that overlie the Magothy aquifer and the Port Washington confining unit and locally abut against or overlie the Port Washington aquifer. The extent and relationships of these deposits to the adjacent hydrogeologic units are shown on plate 1B.

The upper deposits consist mainly of stratified beds of fine to coarse sand and of sand and gravel but also contain thin beds of silt and clay interbedded with coarse-grained material. The outwash that constitutes the bulk of the upper Pleistocene deposits is yellow and brown or, in some places, gray. (See Perlmutter, 1949, and Kilburn, 1979, for further descriptions.)

The upper glacial aquifer, which contains the water table in most of the area, transmits all recharge to the underlying aquifers. Precipitation filtering downward to the water table is the principal source of ground-water recharge. In the past, the upper glacial aquifer was tapped as a water supply by many public-supply wells. Because it has become contaminated by cesspool effluents, fertilizers, and other substances, however, its use for public supply has decreased. Wells tapping the aquifer are now used mainly to supply water for domestic use, irrigation, and commercial and industrial purposes.

The sand and gravel deposits in the upper glacial aquifer are highly permeable and yield large amounts of water to properly constructed wells. The yields of large-capacity public-supply wells screened in the aquifer have been reported to range from 400 gal/min to 1,400 gal/min.

The recent deposits of Holocene age along beaches, streams, swamps, and the bottoms of bays and lakes have not been differentiated from the upper glacial aquifer because they are too thin.

Correlation of Units

The differentiation between deposits of Pleistocene and Cretaceous age throughout most of the northern part of the Town of Oyster Bay is uncertain. On Long Island, the contact between Pleistocene and Cretaceous deposits is an erosional unconformity that is commonly marked by an abrupt lithologic and

mineralogic change. In most of the study area, this boundary has not been delineated with confidence because of the lack of reliable lithologic data (cores and cuttings) and the uncertainty of recognizing this boundary from well drillers' logs, which formed the basis for correlations made during this study. The tops of the Cretaceous deposits may be lower in altitude than indicated on plates 2B, 3A, and 3B because they seem lithologically similar to the overlying Pleistocene deposits in most of the drillers' logs.

The inferred limits of some of the hydrogeologic units in plates 2, 3, and 4 have been extrapolated into areas where little or no data are available. Where the inferred boundaries are questionable, they are so indicated by dashed lines. In the hydrogeologic sections (pl. 1B), extrapolated and questionable extensions of the contacts of some of the units are indicated by question marks.

The hydrogeologic correlations of wells used in constructing the sections and maps in this report are given in table 7 (at end of report) with the altitudes of the tops of the hydrogeologic units penetrated by wells in the northern part of the Town of Oyster Bay.

GROUND-WATER HYDROLOGY

Pumpage

The total reported ground-water pumpage for all purposes in the northern part of the Town of Oyster Bay increased from 1.885 Bgal/yr (5.16 Mgal/d) in 1950 to 10.929 Bgal/yr (29.94 Mgal/d) in 1980. The total reported pumpage is plotted in figure 3A. During 1950-66, pumpage in the area increased at an average annual rate of about 291.6 Mgal/yr (798,900 gal/d); the graph does not reflect a significant effect from the 1962-67 drought. Beginning in 1967, however, the last year of the drought, the trend first reversed then leveled off until 1979. Pumpage during this time ranged between 7.95 Bgal/yr (21.8 Mgal/d) in 1967 and 9.94 Bgal/yr (27.2 Mgal/d) in 1971 and averaged 9.29 Bgal/yr (25.4 Mgal/d). A new upward trend may have started in 1980, when annual pumpage was reported to have been 10.92 billion gallons--an 11.6-percent increase over that in 1979. Whether this is a new trend or a short-term fluctuation will be ascertainable only from future records.

Ground water for public supply and nonpublic supply in the Town of Oyster Bay is derived principally from the upper glacial, Magothy, and Lloyd aquifers. The total amounts pumped from each of the aquifers and the Port Washington aquifer and confining unit are shown in figure 3B.

Ground-water pumpage from the Magothy aquifer is far larger than that from the other aquifers (fig. 3B) and, therefore, determines the trend of the graphs of total pumpage and public-supply withdrawals shown in figure 3A. Pumpage from the Magothy aquifer since 1976 (fig. 3B) has shown a significant upward trend that, through 1980, has increased by an average of more than 680 Mgal/yr (1.86 Mgal/d). This is largely because of a decline in public-supply withdrawals from the upper glacial aquifer and Port Washington confining unit (fig. 3C), but this loss is being made up by increasing pumpage from the

Water Movement

The lateral direction of ground-water flow can be estimated from water-table and potentiometric-surface maps. Ground water moves in the direction of decreasing head and perpendicular to the potentiometric contours. A vertical component of ground-water flow may also develop where differences in hydrostatic head are present with depth in an aquifer or between aquifers.

Upper Glacial Aquifer

The regional and local directions of lateral ground-water movement near the water table in the northern part of the Town of Oyster Bay are controlled from the regional and local ground-water divides (pl. 6A). Other smaller, local ground-water divides (not shown) are present on Mill Neck, Centre Island, and Cove Neck.

The lateral direction of ground-water movement near the water table is indicated on plate 6A by arrows. Water on the south side of the regional divide moves southward to discharge areas along the south shore; water north of the regional divide moves in two directions. Ground water east of the principal local divide shown on plate 6A moves toward discharge areas along or underlying Long Island Sound, Mill Neck Creek, Oyster Bay Harbor, or Cold Spring Harbor, and ground water west of the principal local divide moves westward to discharge areas along Glen Cove Creek or into Hempstead Harbor. Some water along the divides moves directly downward until it meets a zone of low permeability (for example, a clay bed or the top of the Port Washington confining unit or the Raritan confining unit), where it is diverted laterally.

Hydrostatic head differences between the water table (pl. 6A) and the potentiometric surface in the lower part of the Magothy aquifer (pl. 5A) during March and April 1980 ranged from less than 1 ft to more than 20 ft throughout most of the area except near the shore. The head differences were such that recharge from the water table could move downward into the Magothy aquifer over most of the area. Cones of depression due to local ground-water pumpage are not shown on plate 6A because the observation wells in the area are spaced too broadly to provide adequate definition.

Magothy Aquifer

The directions of lateral and vertical ground-water movement in the Magothy aquifer are controlled by the position of the regional and local potentiometric divides and by the hydraulic gradients. (See pl. 5A.) Some of the ground water along the divides moves downward to the bottom of the aquifer, where it then moves laterally toward areas of natural discharge or active pumping wells.

The areas of natural discharge from the Magothy aquifer can be inferred from plates 5A and 6A. Discharge occurs wherever the hydrostatic head in the Magothy is greater than that in the adjacent or overlying units. Water discharges from the Magothy aquifer into the upper glacial aquifer in areas adjacent to Hempstead Harbor and Oyster Bay Harbor, and into the Port Washington confining unit elsewhere.

Hydrostatic heads in the Magothy aquifer in 1980 exceeded those in the Lloyd aquifer by as much as 50 ft throughout a large part of the area. This is due largely to the low permeability of the Raritan confining unit, which confines water in the Lloyd aquifer but does not prevent water from the areas of higher head in the Magothy from moving in the direction of decreasing head and perpendicular to the potentiometric contours.

Lloyd Aquifer

The Lloyd aquifer is recharged by water moving downward from the Magothy and upper glacial aquifers through the Raritan clay and Port Washington confining unit in response to the higher hydrostatic heads in the upper aquifers. The confining units impede but do not prevent this downward movement. The principal areas of recharge of the Lloyd aquifer are those underlying and adjacent to the regional and local potentiometric divides, where flow is predominantly downward (pl. 5B).

Areas of natural discharge of water from the Lloyd aquifer can be inferred from a comparison of heads in the Lloyd (pl. 5B), the Magothy (pl. 5A), and the water table (pl. 6A). Natural discharge from the Lloyd may occur in areas where the head in the Lloyd exceeds heads in overlying or adjacent units. These comparisons indicate that water from the Lloyd aquifer can move laterally and upward through the Port Washington aquifer (where present) and into the upper glacial aquifer, and thence into Hempstead Harbor (section C-C', pl. 1B). Other areas of discharge are along and beneath Long Island Sound (section A-A', pl. 1B). Some discharge may also occur in the Oyster Bay Harbor area (section C-C', pl. 1B) by movement of water upward through the Port Washington aquifer and Port Washington confining unit into the upper glacial aquifer and then into the harbor.

GROUND-WATER QUALITY

Data on ground-water quality in the northern part of the Town of Oyster Bay during 1950-79 are available mainly from analyses made by the Nassau County Department of Health. These analyses, together with those made by the U.S. Geological Survey, represent 155 wells. The number of samples per well during this period ranged from 1 to 37. The frequency of sampling varied, as did the constituents for which analyses were made. It was beyond the scope of this study to make a detailed study of water quality or to review the 2,168 analyses for obvious errors. It was assumed that the number of analyses in error was small enough to not significantly affect general interpretations of water quality that could be made from the analyses.

General Water Quality

Table 3 (p. 22) lists the median and range of the principal constituents and summarizes the general water quality of the three aquifers during 1950-79; table 4 summarizes the ground-water quality in the northern part of the Town of Oyster Bay in 1979. The analyses are arranged by aquifer to facilitate comparison and to demonstrate changes with depth.

EXPLANATION OF COLUMN HEADINGS AND ABBREVIATIONS USED IN TABLE 6

Well Number

Well numbers are assigned by the New York State Department of Environmental Conservation. The prefix N designates Nassau County.

Owner or Well User

The owner or well user is in most cases the name shown on the completion report that was sent to the New York State Department of Environmental Conservation by the driller. During this study, it was found that many of the wells have changed ownership or user. New owners or well users are listed if known.

The following abbreviations are used in the "owner/user" column:

AM. PHYSICS INST ASSOC	American Institute of Physics Associates
BAYVILLE	Village of Bayville
BEAVER DAM CLUB	Beaver Dam Winter Sports Club
CC	Country Club
CERRO WIRE	Cerro Wire and Cable Co.
CERTIFIED IND	Certified Industries
CERT. REDI MIX	Certified Redi-Mix Co., Inc.
CL	Club
CO	Company
C.W. POST COLL.	C.W. Post Center of Long Island University
FABRIC LEATHER	Fabric Leather Corp.
FAIRCHILD CORP.	Fairchild Space and Defense Systems
GENERAL INST.	General Instrument Corp.
GLEN COVE	City of Glen Cove
GLEN COVE BOT.	Glen Cove Bottling Co.
GLEN COVE HOSP.	The Community Hospital at Glen Cove
INC	Incorporated
KOLLSMAN INST.	Kollsman Instrument Co.
LOCUST VLY WD	Locust Valley Water District
L.I. LIGHTING CO.	Long Island Lighting Co.
L.I. RAILROAD CO.	Long Island Railroad Co.
L.I. STATE PARK	Long Island State Park and Recreation Commission
	Planting Field Arboretum
L.I. TUNGSTEN	Li Tungsten Corp.
MILL NECK ESTS.	Association of Owners of Mill Neck Estates
NASSAU CO DPW	Nassau County Department of Public Works
NASSAU CO WTR	Nassau County Water Co.
NATL. PARK SERV	National Park Service
NEW YORK STATE	New York State Conservation Department Cold Spring Harbor Hatchery
OLD WESTBURY	Village of Old Westbury
OYSTER BAY	Town of Oyster Bay
PIPING ROCK WTR	Piping Rock Water Co.
POWERS CHEMCO	Powers Chemco, Inc.
REG. PLAN. BOARD	Nassau-Suffolk Regional Planning Board
RIVESIDE PLAS.	Riverside Plastics Corp.
ST. PATRICKS	Saint Patrick's Roman Catholic Church
ST. UNIV. AT O.W.	State University of New York College at Old Westbury

EXPLANATION OF COLUMN HEADINGS AND ABBREVIATIONS USED IN TABLE 6 (Continued)

SEA CLIFF WTR	Sea Cliff Water Co.
SEL-VRA ACRES	Association of Property Owners of SEL-VRA Acres
U.S. GEOL. SURV	U.S. Geological Survey
WD	Water District

Map Coord

Locations of wells are given by map coordinates, based on a latitude and longitude grid system, to aid the reader in locating the wells shown in plate 1. In this system, 5-minute intervals of latitude are lettered consecutively from south to north, and 5-minute intervals of longitude are numbered consecutively from west to east. The grid coordinates are shown along the margins of plate 1.

Year Completed

Year completed refers to the year in which the well was reported to have been completed or accepted by the original well owner. It may not always be the year in which the well was actually drilled, however.

Altitude of Land-Surface Datum (LSD)

The altitude of land surface at the well was estimated from U.S. Geological Survey 7-1/2-minute quadrangle topographic maps. At most observation wells, however, land-surface elevation was estimated from spirit leveling of the altitude of the measuring points of the wells and is probably accurate to the nearest foot.

Use of Water

The following abbreviations indicate the primary purpose for which water from the well is used:

ARCD	air conditioning	IRR	irrigation
COM	commercial	OTHR	other
DOM	domestic	P.S.	public supply
INST	institutional	RECH	recharge
IND	industrial	UNSD	unused

Use of Well

The following abbreviations indicate the principal use of the well or the purpose for which the well or hole was drilled:

DEST	well or hole destroyed	TEST	test hole
OBS	observation well	UNSD	well unused
RECH	recharge water	WTDR	withdrawal of water

Depth of Well

The figures give well depth or total depth of the drilled test hole, in feet below land surface.

EXPLANATION OF COLUMN HEADINGS AND ABBREVIATIONS USED IN TABLE 6 (Continued)

Screen Setting and Total Screen Length

The altitudes of the top and bottom of the screened interval are given in feet above or below (-) sea level. The total length of screen or perforated pipe in that interval is given in feet. In some wells, screen was set at two or more intervals; in such cases the differences between the altitudes of the two screen settings is different from the total screen length.

Diameter of Well

The diameter of the well is the nominal inside diameter of the smallest or innermost casing at land surface, in inches.

Water Level (feet below land-surface datum)

The water level given is the reported original static water level, in feet above or below land surface, when the well was completed.

Date of Measurement

Date of water-level measurement is by month (M), day (D), and year (Y).

Lift Type

The following abbreviations indicate the type of pump or other conveyance used to bring water to the surface:

CENT	centrifugal	TURB	turbine
JET	jet	NONE	no pump in well
SUBM	submersible	OTHR	some other type of lift

Aquifer Developed

The following abbreviations indicate the hydrogeologic unit that yields water to the well. Where two or more units yield water to the well, the probable principal unit is given:

UPGLAC	Upper glacial aquifer	MAGOTHY	Magothy aquifer
PTWCU	Port Washington confining unit	LLOYD	Lloyd aquifer
PTWAQ	Port Washington aquifer		

Specific Capacity

The value in this column is the number of gallons per minute pumped from the well per foot of drawdown in the well, as reported by drillers.

Abbreviations

COORD	coordinates	IN	inches
D	day	LSD	land surface datum
DIAM	diameter	M	month
FT	feet	MEAS	measurement
GPM/FT	gallons per minute pumped per foot of drawdown in well	SL	sea level
		Y	year

TABLE 6.--WELL COMPLETION DATA ON SELECTED WELLS AND TEST HOLES IN NORTHERN PART OF TOWN OF OYSTER BAY, NASSAU COUNTY, NEW YORK.

WELL NUMBER	OWNER OR WELL USER	MAP COORD.	YEAR COMP- LETED	ALTITUDE OF LSD (FT ABOVE SEA LEVEL)	USE OF WATER	USE OF WELL	DEPTH OF WELL (FT)	SCREEN SETTING (FT ABOVE OR BELOW (-) SEA LEVEL	TOTAL SCREEN LENGTH (FT)	DIAM OF WELL (IN)	WATER LEVEL (FT BELOW LSD)	DATE OF MEAS. (M-D-Y)	LIFT TYPE	AQUIFER DEVEL- OPED	SPECIFIC CAPACITY ((GAL/MIN)/FT)	
N 107	OLD WESTRUPY	D 6	1935	212	P.S.	WTDR	506	-243 TO	-279	36	16	132	08-18-35	TURR	MAGOTHY	1
N 109	JERICO WD	D 6	1925	48	UNSD	DEST	529	-384 TO	-465	59	16	26	06-27-24	NONE	LLOYD	20
N 110	JERICO WD	D 6	1924	56	UNSD	OBS	519	-389 TO	-459	70	16	24.0	07-05-24	NONE	LLOYD	13
N 112	GLEN COVE	E 6	1930	53	UNSD	DEST	169	-79 TO	-116	37	15			NONE	UPGLAC	
N 114	NASSAU CC	E 6	1910	123	IHR	WTDR	117	30 TO	10	20	10				MAGOTHY	
N 115	LOCUST VLY WD	E 6	1925	75	UNSD	UNSD	414	-265 TO	-332	67	18			TURR	PTWAO	7
N 116	LOCUST VLY WD	E 6	1925	80	UNSD	UNSD	256							NONE	UPGLAC	
N 117	LOCUST VLY WD	E 6		77	UNSD	UNSD	155				16			NONE	JPGLAC	
N 118	LOCUST VLY WD	E 6	1932	55	P.S.	WTDR	477	-347 TO	-406	59	24			TURR	LLOYD	19
N 119	LOCUST VLY WD	E 6	1935	80	P.S.	WTDR	572	-417 TO	-491	74	18			TURR	LLOYD	29
N 120	LOCUST VLY WD	E 6	1933	80	UNSD	TEST	558							NONE		
N 121	CREEK CLUR	E 6	1933	120	UNSD	TEST	415							NONE		
N 121	CREEK CLUR	E 6	1933	120	IHR	WTDR	219	-29 TO	-87	42	12	56.5	10-00-33	TURR	UPGLAC	26
N 124	CREEK CLUR	E 6	1920	9	UNSD	OBS	390				12			NONE	LLOYD	
N 149	HICKSVILLE WD	D 7		161	UNSD	UNSD	153								UPGLAC	
N 150	HICKSVILLE WD	D 7		161	UNSD	DEST	148								UPGLAC	14
N 166	PIPING ROCK WTR	E 7	1936	55	UNSD	UNSD	118	-43 TO	-63	20	6	4.8	11-19-36	NONE	MAGOTHY	28
N 167	PIPING ROCK WTR	E 7	1936	55	UNSD	UNSD	123	-45 TO	-65	20	6			NONE	MAGOTHY	
N 173	M.C.TAYLOR	E 7	1920	38	DOM	WTDR	398			11	6	19.5	03-00-20	TURR	LLOYD	
N 198	JERICO WD	D 8	1930	240	P.S.	WTDR	629	-327 TO	-377	50	18			TURR	MAGOTHY	17
N 199	JERICO WD	D 8	1930	235	P.S.	WTDR	611	-309 TO	-365	56	18			TURR	MAGOTHY	28
N 202	OYSTER RAY WD	E 7		18	UNSD	UNSD	420				5			NONE	LLOYD	
N 486	A.HUTCHINSON	E 7		3			190									
N 511	W.P.WOODBRIDGE	E 7	1905	11	UNSD	OBS	359			6	3			NONE	PTWAO	
N 551	NATL. PARK SERV	E 7		154	UNSD	UNSD	325								PTWCU	
N 570	JERICO WD	D 8	1937	237	P.S.	WTDR	600	-323 TO	-363	40	18	178	07-15-37	TURR	MAGOTHY	66
N 576	L.I.RAILROAD CO	D 7	1936	144	UNSD		409	-255 TO	-265	10	8			NONE	MAGOTHY	
N 585	OYSTER RAY WD	E 7	1937	18	P.S.	WTDR	78	-39 TO	-59	20	12	2	09-03-37	OTHR	UPGLAC	15
N 590	NATL. PARK SERV	E 8	1937	120	DOM	WTDR	165	-32 TO	-42	10	8	130	07-21-37		PTWCU	6
N 613	PIPING ROCK WTR	E 7	1937	55	UNSD	DEST	140	-61 TO	-81	20	6	5.5	12-10-37	NONE	MAGOTHY	18
N 614	PIPING ROCK WTR	E 7	1937	55	UNSD	UNSD	122	-44 TO	-64	20	6	4.5	12-28-37	NONE	MAGOTHY	28
N 638	OLD WESTRUPY CC	D 6	1938	295	IHR	WTDR	560	-250 TO	-265	15	12	209	00-00-62	TURR	MAGOTHY	3
N 660	POWERS CHEMCO	E 6		58	IND	WTDR	404				15			TURR	LLOYD	
N 661	POWERS CHEMCO	E 6	1939	60	UNSD	UNSD	403	-264 TO	-340	70	10			NONE	LLOYD	11
N 733	OYSTER RAY WD	E 7		18	UNSD	DEST	350				6			NONE	PTWAO	
N 734	OYSTER RAY WD	E 7		18	UNSD	UNSD	420				10			NONE	LLOYD	12
N 735	OYSTER RAY WD	E 7		18	P.S.	WTDR	100							OTHR	UPGLAC	
N 736	OYSTER RAY WD	E 7		20	P.S.	WTDR	70				6			OTHR	UPGLAC	
N 801	GLEN COVE	E 6		53	UNSD	DEST	36				10			NONE	UPGLAC	
N 802	GLEN COVE	E 6		53	UNSD	DEST	162				8			NONE	UPGLAC	

TABLE 6.--WELL COMPLETION DATA ON SELECTED WELLS AND TEST HOLES IN NORTHERN PART OF TOWN OF OYSTER BAY, NASSAU COUNTY, NEW YORK.

WELL NUMBER	OWNER OR WELL USER	MAP COORD.	YEAR COM- PLETED	ALTITUDE OF LSD (FT ABOVE SEA LEVEL)	USE OF WATER	USE OF WELL	DEPTH OF WELL (FT)	SCREEN SETTING (FT ABOVE OR BELOW (-) SEA LEVEL)	TOTAL SCREEN LENGTH (FT)	DIAM OF WELL (IN)	WATER LEVEL (FT BELOW LSD)	DATE OF MEAS. (M-D-Y)	LIFT TYPE	AQUIFER DEVEL- OPED	SPECIFIC CAPACITY [(GAL/MIN)/FT]	
N 2017	FRIEDMAN	E 7	1945	10	DUM	WTDR	395	-375 TO	-384	9	8	FLOWING	04-25-45		LLOYD	
N 2027	SORFENSON LUMPH	E 6	1945	21	UNSD	DEST	76	-39 TO	-54	15	6	FLOWING	04-10-45	NONE	UPGLAC	12
N 2060	GLEN COVE ROT.	E 6	1946	26	UNSD	UNSD	82	-34 TO	-44	10	8	8	06-01-46		UPGLAC	13
N 2072	HICKSVILLE WD	D 7	1946	162	UNSD	DEST	159	24 TO	3	21	10	90	05-15-46	TURR	UPGLAC	28
N 2087	POWERS CHEMCO	E 6	1946	50	UNSD	DEST	75	-9 TO	-25	16	8	15	02-25-46	NONE	UPGLAC	2
N 2087	POWERS CHEMCO	E 6	1946	50	IND	WTDR	345	-284 TO	-295	11	8	20	07-15-52	TURR	LLOYD	6
N 2088	F.M. GOULD	E 8	1932	159			605			8					LLOYD	
N 2113	G. CARDELLI	E 7	1946	10	DUM	WTDR	449	-417 TO	-439	22	8	FLOWING	05-16-46		LLOYD	
N 2132	KOENIG	E 7	1907	10	UNSD	DEST	469			5		FLOWING	00-00-14	NONE	LLOYD	
N 2208	NEW YORK STATE	E 8	1903	15	IND	WTDR	76			6				NONE	UPGLAC	
N 2209	NEW YORK STATE	E 8	1903	15	IND	WTDR	84			6				NONE	UPGLAC	
N 2210	NEW YORK STATE	E 8	1903	15	IND	WTDR	86			5				NONE	UPGLAC	
N 2211	NEW YORK STATE	E 8	1903	15	IND	WTDR	66			6				NONE	UPGLAC	
N 2238	L.I. RAILROAD CO	E 7		10			198			8					PTWCU	
N 2241	BAKER-CAMPRELL	E 7	1947	18	DUM	WTDR	374	-346 TO	-358	12	8	46	10-01-47		LLOYD	25
N 2316	PALL CORP	E 6	1930	157	IND	WTDR	179			6				TURR	UPGLAC	
N 2409	NEW YORK STATE	E 8	1947	15	IND	WTDR	93	-51 TO	-71	20	10	FLOWING	09-10-47	NONE	UPGLAC	18
N 2410	NEW YORK STATE	E 8	1947	15	IND	WTDR	90	-50 TO	-70	20	10	FLOWING	09-12-47	NONE	UPGLAC	25
N 2528	NASSAU CO DPW	E 7	1946	92	UNSD	TEST	343							NONE		
N 2528	NASSAU CO DPW	E 7	1947	93	UNSD	OHS	328	-185 TO	-189	4	6			NONE	UPGLAC	
N 2616	GLEN HEAD CC	E 6	1931	75	IND	WTDR	232	-109 TO	-146	37	12	8	01-30-30	TURR	UPGLAC	59
N 2920	SFL-VRA ACRES	E 8	1948	10	P.S.	WTDR				10					LLOYD	
N 3110	L.I. LIGHTING CO	D 6	1949	27	IND	WTDR	151	-93 TO	-124	31	12	4.9	06-27-49	TURR	UPGLAC	43
N 3444	JERICHO WD	D 7	1949	263	UNSD	TEST	460							NONE		
N 3466	GLEN COVE	E 6	1950	53	P.S.	WTDR	177	-95 TO	-120	25	12	FLOWING	04-25-50		UPGLAC	9
N 3474	JERICHO WD	D 7	1951	244	P.S.	WTDR	517	-208 TO	-268	60	18	153	06-02-50	TURR	MAGOTHY	31
N 3475	JERICHO WD	D 7	1950	208	P.S.	WTDR	487	-224 TO	-274	50	18	121	07-22-50	TURR	MAGOTHY	36
N 3486	OYSTER BAY WD	E 7	1950	18	P.S.	WTDR	102	-52 TO	-84	32	12				UPGLAC	
N 3561	OYSTER BAY WD	E 7	1950	18	P.S.	WTDR	120	-70 TO	-100	30	12	FLOWING	08-31-50		UPGLAC	
N 3569	CERRO WIRE	D 7	1951	181	IND	WTDR	402	-172 TO	-221	49	16	95	06-04-51	TURR	MAGOTHY	10
N 3838	SPIEGEL ASSOC.	D 7	1951	195	UNSD	DEST	163	42 TO	32	10	8	105	12-03-51	NONE	MAGOTHY	4
N 3850	FAIRCHILD CORP	D 7		185	UNSD	TEST	501							NONE		
N 3850	FAIRCHILD CORP	D 7	1953	185	UNSD	UNSD	445	-215 TO	-255	40	16	104	02-08-52	TURR	MAGOTHY	39
N 3860	FAIRCHILD CORP	D 7	1953	183	UNSD	UNSD	445	-217 TO	-257	40	16	101	03-25-52	SURF	MAGOTHY	43
N 3874	FAIRCHILD CORP	D 7	1952	183	UNSD	UNSD	335	-127 TO	-147	20	16	106	11-06-52	TURR	MAGOTHY	8
N 3877	HICKSVILLE WD	D 7	1952	152	UNSD	TEST	555							NONE		
N 3878	HICKSVILLE WD	D 7	1952	150	UNSD	TEST	604							NONE		
N 3878	HICKSVILLE WD	D 7	1952	150	P.S.	WTDR	428	-225 TO	-278	53	18	67	07-22-52	TURR	MAGOTHY	53
N 3892	GLEN COVE	E 6	1953	145	UNSD	TEST	445							NONE		
N 3892	GLEN COVE	E 6	1953	145	P.S.	WTDR	251	6 TO	-101	54	16	87	10-07-53		UPGLAC	40

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WELL NUMBER	OWNER OR WELL USER	MAP COORD.	YEAR COMP- LETED	ALTITUDE OF LSD (FT ABOVE SEA LEVEL)	USE OF WATER	USE OF WELL	DEPTH OF WELL (FT)	SCREEN SETTING (FT ABOVE OR BELOW (-) SEA LEVEL)	TOTAL SCREEN LENGTH (FT)	DIAM OF WELL (IN)	WATER LEVEL (FT BELOW LSD)	DATE OF MEAS. (M-D-Y)	AQUIFER LIFT TYPE	DEVEL- OPED	SPECIFIC CAPACITY ((GAL/MIN)/FT)	
N 3925	COCA COLA CO	D 7	1952	150	UNSD	UNSD	143	36 TO	15	21	8	63	08-14-52	TURR	UPGLAC	
N 3953	HICKSVILLE WD	D 7	1952	152	UNSD	TEST	514							NONE		
N 3953	HICKSVILLE WD	D 7	1953	152	P.S.	WTOR	419	-17 TO	-267	92	18	66	11-14-52	TURR	MAGOTHY	69
N 3982	A.DAVIS	E 7	1952	20	DUM	WTOR	419	-376 TO	-399	23	6	FLOWING	10-07-52	TURR	LLOYD	
N 4058	CERTIFIED IND	E 7	1952	75	UNSD	DEST	200							NONE	MAGOTHY	
N 4095	PLAINVIEW WD	D 8	1954	150	P.S.	WTOR	495	-290 TO	-340	50	18	72	08-03-54	TURR	MAGOTHY	31
N 4096	PLAINVIEW WD	D 8	1954	150	P.S.	WTOR	499	-294 TO	-344	50	18	68	08-02-54	TURR	MAGOTHY	37
N 4097	PLAINVIEW WD	D 8	1954	158	P.S.	WTOR	470	-255 TO	-305	50	18	75	08-04-54	TURR	MAGOTHY	36
N 4133	JERICHO WD	D 7	1954	192	P.S.	WTOR	445	-208 TO	-258	50	18	102	05-28-54	TURR	MAGOTHY	17
N 4136	OYSTER BAY WD	E 7	1953	18	UNSD	UNSD	310							NONE	PTWAO	
N 4137	OYSTER BAY WD	E 7	1953	18	UNSD	UNSD	188	-145 TO	-170	25	12	FLOWING	04-28-53	NONE	PTWCU	
N 4245	JERICHO WD	D 7	1955	222	P.S.	WTOR	571	-303 TO	-343	40	18	150	11-12-53	TURR	MAGOTHY	30
N 4246	JERICHO WD	D 7	1954	200	UNSD	UNSD	458	-203 TO	-253	50	18	110	11-05-54	TURR	MAGOTHY	31
N 4376	MARY G. RUCKE	E 7	1953	58	DUM	WTOR	367	-298 TO	-308	10	6	50	12-07-53	TURR	LLOYD	15
N 4400	OYSTER BAY WD	E 8	1954	36	UNSD	TEST	400							NONE		
N 4400	OYSTER BAY WD	E 8	1957	36	P.S.	WTOR	302	-178 TO	-266	88	20	2	09-04-56	TURR	MAGOTHY	50
N 4431	CERTIFIED IND	D 7	1953	98	UNSD	DEST	30	79 TO	68	11	4	4	06-00-53	NONE	JPGLAC	11
N 4432	DYCKMAN LAUNDRY	E 6	1955	28	COM	WTOR	352	-304 TO	-320	16	6	FLOWING	04-00-55	TURR	LLOYD	2
N 4440	F. MARMORALE	E 7	1954	16	DUM	WTOR	314	-290 TO	-300	10	6	0	07-16-54		LLOYD	10
N 4462	NORTH SHORE CC	E 6	1954	69	UNSD	TEST	271							NONE		
N 4462	NORTH SHORE CC	E 6	1954	69	INR	WTOR	181	-80 TO	-112	32	12	46	05-25-54	TURR	PTWCU	10
N 4633	MEADOWBROOK CL	D 7		176	UNSD	TEST	308							NONE		
N 4633	MEADOWBROOK CL	D 7	1954	176	INR	WTOR	216	13 TO	-39	52	16	94	08-25-54	TURR	MAGOTHY	43
N 4639	NASSAU CC	E 6	1911	123		WTOR	258									
N 4760	PINE HOLLOW CC	E 7	1954	220	INR	WTOR	247	5 TO	-27	32	12	172	09-15-54	TURR	JPGLAC	51
N 4891	PINE HOLLOW CC	E 7	1933	230	UNSD	UNSD	245				10	183	05-00-33	TURR	UPGLAC	9
N 5058	WM. J. LEVITT	D 7	1955	238	UNSD	UNSD	255	3 TO	-17	20	8	151	11-17-54	TURR	MAGOTHY	25
N 5071	NASSAU CC	E 6	1954	143	INR	WTOR	242	-67 TO	-99	32	12	90	10-26-54	TURR	MAGOTHY	29
N 5086	S. L. LANG	D 7	1955	225	UNSD	DEST	193	36 TO	32	4	4	170	00-00-55	NONE	MAGOTHY	
N 5152	LOCUST VLY WD	E 6	1956	44	P.S.	WTOR	360	-261 TO	-311	50	18	18	08-10-56	TURR	PTWAO	11
N 5188	P. SAMRAD	E 7	1955	22	DUM	WTOR	375	-340 TO	-350	10	6			TURR	LLOYD	3
N 5201	JERICHO WD	D 6	1956	48	P.S.	WTOR	509	-386 TO	-456	70	18	36	06-12-56	TURR	LLOYD	27
N 5250	NASSAU CO DPW	E 6	1944	128	UNSD	DEST	89				2.50	71.48	06-23-44	NONE	UPGLAC	
N 5250	NASSAU CO DPW	E 6	1967	123	UNSD	OBS	101				1.25	79.80	01-24-67	NONE	JPGLAC	
N 5261	GLEN COVE	E 6	1955	145	UNSD	TEST	302							NONE		
N 5261	GLEN COVE	E 6	1955	145	P.S.	WTOR	235	14 TO	-85	59	18	97	05-14-55	SURF	PTWCU	43
N 5332	CERTIFIED IND	E 7	1955	73	UNSD	DEST	162	-44 TO	-89	45	12	28	11-26-55	NONE	JPGLAC	34
N 5335	CERT. REED MIX	D 7	1955	170	UNSD	DEST	144	47 TO	26	21	6	80	00-00-55	NONE	MAGOTHY	
N 5450	ENGINEERS CC	D 6	1955	57	INR	WTOR	80	-1 TO	-23	22	12	7.5	06-29-55	TURR	UPGLAC	15
N 5672	REAVEN DAM CLIM	E 7	1955	25	COM	WTOR	121	-76 TO	-96	20	8	FLOWING	12-06-55	TURR	JPGLAC	

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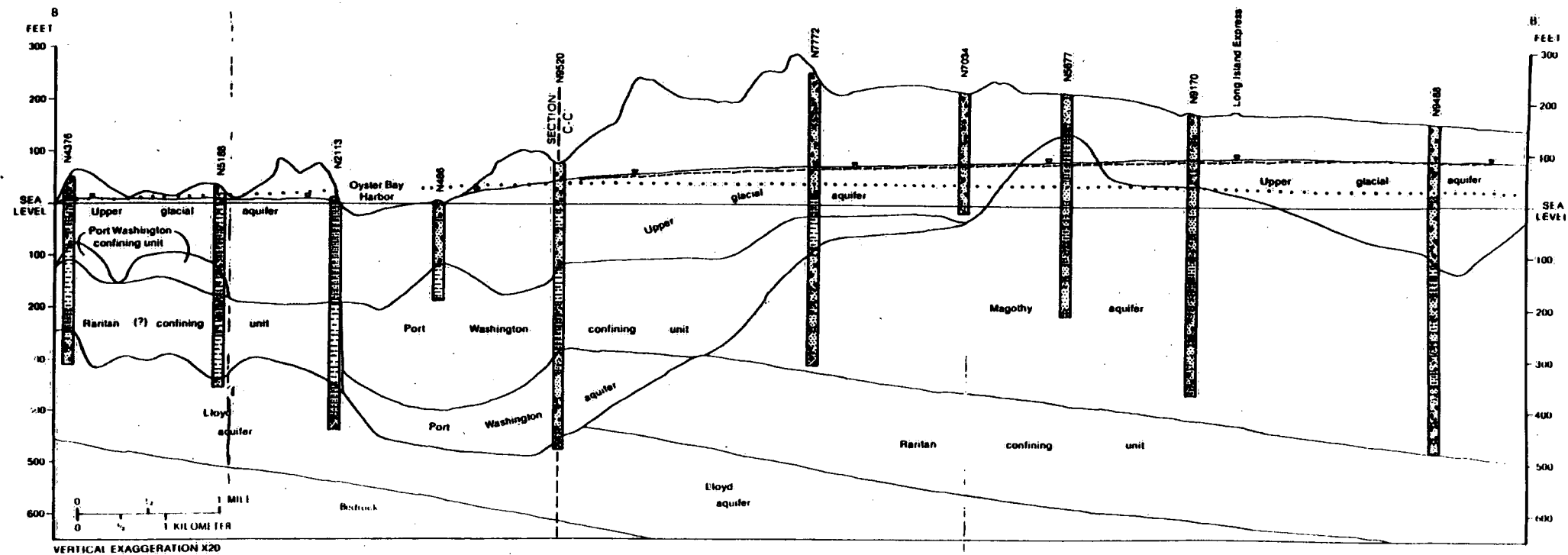
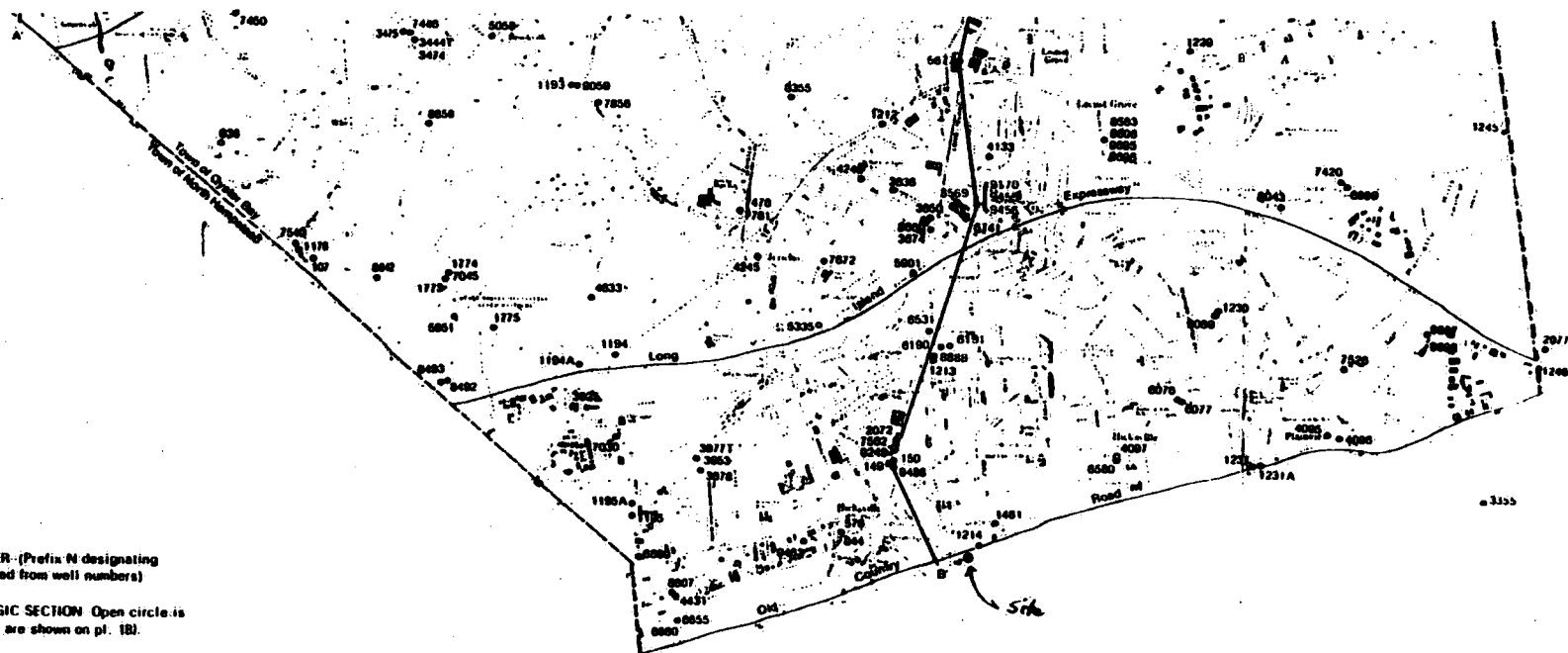
WELL NUMBER	OWNER OR WELL USER	MAP COORD.	YEAR COMP- LETED	ALTITUDE OF LSD (FT ABOVE SEA LEVEL)	USE OF WATER	USE OF WELL	DEPTH OF WELL (FT)	SCREEN SETTING (FT ABOVE OR BELOW (-) SEA LEVEL)	TOTAL SCREEN LENGTH (FT)	DIAM OF WELL (IN)	WATER LEVEL (FT BELOW LSD)	DATE OF MEAS. (M-D-Y)	LIFT TYPE	AQUIFER DEVELOP- ED	SPECIFIC CAPACITY ((GAL/MIN)/FT)	
N 5677	KOLLSMAN INST.	D 7	1955	218	UNSD	TEST	429							NONE		
N 5677	KOLLSMAN INST.	D 7	1956	218		WTDR	257	47 TO	-39	60	12	130	06-22-56	TURR	MAGOTHY	44
N 5762	GLEN COVE	E 6	1956	145	UNSD	TEST	310							NONE		
N 5762	GLEN COVE	E 6	1956	145	P.S.	WTDR	283	-76 TO	-135	59	18	81	07-05-56	SUBM	MAGOTHY	58
N 5792	SEA CLIFF WATER	E 6	1956	140	UNSD	TEST	361							NONE		
N 5792	SEA CLIFF WATER	E 6	1957	140	P.S.	WTDR	300	-115 TO	-155	40	20	84.4	11-07-57	TURR	UPGLAC	175
N 5851	ST.UNIV.AT O.W.	D 7	1956	218	DUM	WTDR	177	47 TO	41	6	6	128	08-31-56	SUBM	MAGOTHY	2
N 5901	CENT.REDI-MIX	D 7	1956	179	UNSD	DEST	144	42 TO	31	11	4	90	06-02-56	NONE	MAGOTHY	
N 5994	GLEN COVE HOSP	E 6	1957	130	INST	WTDR	224	-43 TO	-96	36	16	73	08-22-56	TURR	MAGOTHY	43
N 6042	MILL NICK ESTS.	E 7		10	P.S.	WTDR	347	-318 TO	-330	12	8			PT480		
N 6076	PLAINVIEW WD	D 8	1956	158	UNSD	TEST	694							NONE		
N 6076	PLAINVIEW WD	D 8	1957	158	P.S.	WTDR	358	-138 TO	-200	62	20	73	02-11-57	TURR	MAGOTHY	41
N 6077	PLAINVIEW WD	D 8	1956	158	UNSD	TEST	692							NONE		
N 6077	PLAINVIEW WD	D 8	1957	158	P.S.	WTDR	465	-240 TO	-302	62	20	75	03-06-57	TURR	MAGOTHY	45
N 6092	JERICHO WD	D 8	1958	241	P.S.	WTDR	637	-320 TO	-390	70	18	184	06-25-57	TURR	MAGOTHY	52
N 6093	JERICHO WD	D 8	1957	259	P.S.	WTDR	612	-287 TO	-347	60	18	171	09-09-57	TURR	MAGOTHY	54
N 6190	HICKSVILLE WD	D 7	1957	177	UNSD	TEST	642							NONE		
N 6190	HICKSVILLE WD	D 7	1958	177	P.S.	WTDR	605	-373 TO	-423	50	20	94	08-22-57	TURR	MAGOTHY	41
N 6191	HICKSVILLE WD	D 7	1957	176	UNSD	TEST	676							NONE		
N 6191	HICKSVILLE WD	D 7	1958	176	P.S.	WTDR	555	-313 TO	-374	61	20	93.5	06-26-57	TURR	MAGOTHY	37
N 6289	PIPING ROCK CL	E 6	1957	162	UNSD	TEST	385							NONE		
N 6289	PIPING ROCK CL	E 6	1957	162	INR	WTDR	219	40 TO	-57	37	12	71	09-19-57	TURR	UPGLAC	19
N 6294	U.S. GEOL SURV	E 7	1957	93	UNSD	DEST	24				1.25	22.81	06-17-57	TURR	UPGLAC	
N 6294	U.S. GEOL SURV	E 7	1966	93	UNSD		37				1.25			NONE	UPGLAC	
N 6416	ZARA ASPHALT CO	E 6	1958	15	UNSD	TEST	295							NONE		
N 6416	ZARA ASPHALT CO	E 6	1958	15	UNSD	UNSD	107	-83 TO	-92	9	6	6.5	06-06-58	TURR	UPGLAC	1
N 6435	LAVISTA	E 7	1958	58	DUM	WTDR	434	-360 TO	-380	15	6	38.5	06-00-58	SURM	LLOYD	
N 6444	BROOKVILLE CC	E 6	1958	170	INR	WTDR	257	-51 TO	-87	36	12	75	06-30-58	TURR	MAGOTHY	37
N 6531	RIVERSIDE PLAS.	D 7	1959	178	UNSD	DEST	119	64 TO	59	5	6	89	09-25-58	NONE	UPGLAC	8
N 6531	METCO INC	D 7	1966	178	INR	WTDR	174	17 TO	5	12	6	102	05-05-66	SURM	UPGLAC	10
N 6549	POWERS CHEMCO	E 6	1958	32	IND	RECH	425	-292 TO	-393	60	8	20	08-13-58	NONE	LLOYD	14
N 6579	GLEN COMPONENTS	E 6	1958	57		WTDR	144	-73 TO	-89	16	4			TURR	UPGLAC	
N 6580	PLAINVIEW WD	D 8	1958	158	UNSD	TEST	702					75	08-13-58	TURR		
N 6580	PLAINVIEW WD	D 8	1958	158	P.S.	WTDR	601	-365 TO	-438	63	20	75	08-13-58	TURR	MAGOTHY	54
N 6587	ZARA ASPHALT	E 6	1958	15	UNSD	UNSD	54	-25 TO	-41	16	6	7	06-06-58	TURR	UPGLAC	
N 6651	JERICHO WD	D 7	1960	232	P.S.	WTDR	615	-328 TO	-378	50	18	133.7	05-17-60	TURR	MAGOTHY	27
N 6655	METCO INC	D 7	1959	122	UNSD	UNSD	234	-74 TO	-114	40	8	47	04-24-59	NONE	MAGOTHY	15
N 6665	U.S. GEOL SURV	D 6	1959	97	UNSD		29	70 TO	68	2	1.25			NONE	UPGLAC	
N 6666	U.S. GEOL SURV	D 6	1959	97	UNSD		12				1.25			NONE	UPGLAC	
N 6667	U.S. GEOL SURV	D 6	1959	94	UNSD		43	53 TO	51	2	1.25			NONE	UPGLAC	

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N 7446	JERICHO WD	D 7	1964	222	P.S.	WTDR	494	-221 TO	-271	50	20	146	05-26-64	TURR MAGOTHY	30
N 7450	NASSAU CO DPW	D 6	1975	176	UNSD	ORS	134	47 TO	42	5	4			NONE MAGOTHY	
N 7478	NASSAU CO DPW	D 7	1963	217	UNSD	ORS	165				4	131.40	07-18-63	NONE MAGOTHY	
N 7510	F.F.PASSARELLA	E 7	1964	19	DOM	WTDR	329	-302 TO	-310	8	8	12	04-21-64	SURM LLOYD	2
N 7526	PLAINVIEW WD	D 8	1964	228	P.S.	WTDR	691	-342 TO	-460	73	20	140	08-03-64	SURM MAGOTHY	43
N 7546	NASSAU CO DPW	E 7	1964	11	UNSD	ORS	364	-348 TO	-353	5	4			NONE LLOYD	
N 7547	NASSAU CO DPW	E 6	1966	9	UNSD	TEST	322				6			NONE	
N 7549	OLD WESTBURY	D 6	1965	198	P.S.	WTDR	504	-251 TO	-301	50	20	126	06-03-65	TURR MAGOTHY	22
N 7562	HICKSVILLE WD	D 7	1964	163	P.S.	WTDR	550				20	80	06-01-64	TURR MAGOTHY	28
N 7570	BAYVILLE	E 7	1964	125	UNSD	TEST	522							NONE	
N 7593	JERICHO WD	E 8	1965	253	P.S.	WTDR	473	-155 TO	-215	60	20	205	05-24-65	TURR MAGOTHY	40
N 7614	POWERS CHEMCO	E 6	1964	32	IND	WTDR	393	-319 TO	-360	41	10	32	08-29-64	TURR LLOYD	4
N 7620	RAYVILLE	E 7	1964	125	P.S.	WTDR	480	-287 TO	-355	68	16	113.36	09-09-64	TURR LLOYD	19
N 7643	RAYVILLE	E 7	1964	125	P.S.	WTDR	214	-34 TO	-93	59	20	121.6	09-18-64	TURR UPGLAC	169
N 7644	J.D.MOONEY	E 7	1964	19	DOM	WTDR	320	-286 TO	-301	15	4	13	09-04-64	SURM LLOYD	5
N 7664	ENGINEERS CC	D 6	1965	53	IHR	WTDR	85	-5 TO	-26	21	12			TURR UPGLAC	22
N 7665	LOCUST VLY WD	E 6	1966	218	P.S.	WTDR	375	-102 TO	-152	50	20	172	12-11-65	TURR UPGLAC	30
N 7672	NASSAU CO DPW	D 7	1964	177	UNSD	ORS	150	20 TO	18	2	2	90.00	11-02-64	NONE MAGOTHY	
N 7719	RAYVILLE	E 7	1964	20	UNSD	ORS	400	-378 TO	-380	2	4			NONE	
N 7745	W.J.LEVITT	E 7	1965	150	DOM	WTDR	215	-40 TO	-65	25	16	105	02-24-65	TURR PTWCU	6
N 7772	JERICHO WD	E 7	1966	254	P.S.	WTDR	568	-245 TO	-305	60	20	194	05-19-66	TURR MAGOTHY	23
N 7773	JERICHO WD	E 7	1966	230	P.S.	WTDR	565	-270 TO	-330	60	20	188	05-24-66	TURR MAGOTHY	30
N 7781	JERICHO WD	D 7	1965	217	P.S.	WTDR	459	-177 TO	-237	60	20	140	06-29-65	TURR MAGOTHY	42
N 7782	ST. PATRICKS	E 6	1965	95	ARCO	WTDR	226	-105 TO	-131	26	8	40.2	03-14-65	TURR MAGOTHY	
N 7830	MILL RIVER CLUB	E 7	1965	118	IHR	WTDR	197	-48 TO	-79	31	12	67	05-05-65	TURR MAGOTHY	33
N 7834	GLEN HEAD CC	E 6	1965	150	IHR	WTDR	202	-21 TO	-52	31	12	116	05-25-65	TURR UPGLAC	27
N 7857	SFA CLIFF WATER	E 6	1966	195	P.S.	WTDR	614	-365 TO	-419	54	20	195	05-10-66	SURM LLOYD	13
N 7858	TAM OSHANTER CC	D 7	1966	219	IHR	WTDR	375	-92 TO	-142	50	16	140	03-01-66	TURR MAGOTHY	80
N 8043	JERICHO WD	D 8	1966	222	P.S.	WTDR	688	-293 TO	-466	173	20	153	06-10-66	TURR MAGOTHY	48
N 8048	POWERS CHEMCO	E 6	1966	60		RECH	370	-266 TO	-310	44	12			NONE LLOYD	
N 8123	WINSTON GUEST	E 7	1966	263	OTHR	WTDR	324	-56 TO	-63	7	6	215	09-00-66	SURM MAGOTHY	
N 8183	OYSTER BAY WD	E 7	1966	90	UNSD	TEST	487							NONE	
N 8193	OYSTER BAY WD	E 7	1968	90	P.S.	WTDR	230	-91 TO	-140	49	16	54.5	11-17-67	TURR UPGLAC	30
N 8224	PHOTOCIRUITS	E 6	1970	58	IND	WTDR	155	-46 TO	-97	51	12	11.5	01-29-70	TURR UPGLAC	254
N 8249	HICKSVILLE WD	D 7	1967	163	P.S.	WTDR	495	-237 TO	-327	90	20	89	02-25-67	SURM MAGOTHY	71
N 8259	NASSAU CO DPW	E 6	1967	70	UNSD	ORS	42	30 TO	28	2	1.25	35.50	01-17-67	NONE UPGLAC	
N 8326	GLEN COVE	E 6	1967	53	UNSD	TEST	507							NONE	
N 8326	GLEN COVE	E 6	1965	53	P.S.	WTDR	164	-67 TO	-112	45	20	6.5	07-26-67	SURM UPGLAC	33
N 8327	GLEN COVE	E 6	1967	53	UNSD	TEST	362							NONE	
N 8327	GLEN COVE	E 6	1965	53	P.S.	WTDR	164	-65 TO	-115	50	20	13.5	09-06-67	SURM UPGLAC	41

TABLE 6.--WELL COMPLETION DATA ON SELECTED WELLS AND TEST HOLES IN NORTHERN PART OF TOWN OF OYSTER BAY, NASSAU COUNTY, NEW YORK.

WELL NUMBER	OWNER OR WELL USER	MAP COORD.	YEAR COMPLETED	ALTITUDE OF LSD (FT ABOVE SEA LEVEL)	USE OF WATER	USE OF WELL	DEPTH OF WELL (FT)	SCREEN SETTING (FT ABOVE OR BELOW (-) SEA LEVEL)	TOTAL SCREEN LENGTH (FT)	DIA OF WELL (IN)	WATER LEVEL (FT BELOW LSD)	DATE OF MEAS. (M-D-Y)	LIFT TYPE	AQUIFER DEVELOPED	SPECIFIC CAPACITY ((GAL/MIN)/FT)
N 9089	NASSAU CO DPW	D 8	1975	173	UNSD	OBS	178	0 TO	-5	5	4	93.20 11-19-75	NONE	MAGOTHY	
N 9100	NASSAU CO DPW	E 6	1976	54	UNSD	OBS	70	-11 TO	-16	5	4	13.85 02-27-76	NONE	PTWCU	
N 9115	NASSAU CO DPW	E 6	1976	145	UNSD	OBS	110	40 TO	35	5	4		NONE	MAGOTHY	
N 9117	NASSAU CO DPW	E 6	1976	112	UNSD	OBS	73	44 TO	39	5	4	40.73 04-05-76	NONE	MAGOTHY	
N 9127	NASSAU CO DPW	E 7	1976	10	UNSD	OBS	41	-26 TO	-31	5	4	6.32 07-09-76	NONE	JPGLAC	
N 9152	NASSAU CO DPW	E 8	1976	40	UNSD	OBS	58	-13 TO	-18	5	4		NONE	JPGLAC	
N 9154	NASSAU CO DPW	E 7	1976	34	UNSD	OBS	66	-27 TO	-32	5	4		NONE	PTWCU	
N 9170	REG. PLAN. BOARD	D 7	1977	184	UNSD	TEST	553						NONE		
N 9170	REG. PLAN. BOARD	D 7	1977	184	UNSD	OBS	510	-321 TO	-326	5	1.25	95.5 01-00-77	NONE	MAGOTHY	
N 9189	NASSAU CO CPW	E 7	1977	59	UNSD	OBS	42	22 TO	17	5	4	13.05 03-02-77	NONE	JPGLAC	
N 9210	GLEN COVE	E 6	1979	142	P.S.	WTDR	275	-67 TO	-128	61	20	99.2 08-19-77		MAGOTHY	
N 9211	GLEN COVE	E 6	1979	142	P.S.	WTDR	269	-60 TO	-122	62	20		TURR	MAGOTHY	34
N 9259	HENRY R. STERN	E 7	1977	58	ISR	UNSD	5 10			3 1	0	55.5 09-02-77	SURM	JPGLAC	15
N 9276	D. HOLTERRSCH	E 7	1978	10	UNSD	TEST	321						NONE		
N 9300	NASSAU CO WTR	E 7		45	UNSD	DEST							NONE	JPGLAC	
N 9301	NASSAU CO WTR	E 7		45	UNSD	DEST							NONE	JPGLAC	
N 9302	NASSAU CO WTR	E 7		45	UNSD	DEST							NONE	JPGLAC	
N 9303	NASSAU CO WTR	E 7		45	UNSD	DEST							NONE	JPGLAC	
N 9314	NASSAU CO DPW	E 7	1977	32	UNSD	OBS	54	-17 TO	-22	5	4		NONE	PTWCU	
N 9315	NASSAU CO DPW	E 6	1977	9	UNSD	OBS	41	-27 TO	-32	5	4	3.40 05-04-77	NONE	JPGLAC	
N 9316	NASSAU CO DPW	E 7	1977	25	UNSD	OBS	58	-28 TO	-33	5	4	21.36 07-13-77	NONE	JPGLAC	
N 9317	NASSAU CO DPW	D 7	1977	218	UNSD	OBS	194	29 TO	24	5	4		NONE	MAGOTHY	
N 9334	GLEN COVE	E 6	1978	143	UNSD	TEST	631						NONE		
N 9334	GLEN COVE	E 6	1978	143	UNSD	TEST	603	-417 TO	-460	43			TURR	LLOYD	
N 9334	GLEN COVE	E 6		143	P.S.	WTDR								MAGOTHY	
N 9353	NASSAU CO DPW	D 7	1978	143	UNSD	OBS	101	47 TO	42	5	4	57.82 05-11-78	NONE	MAGOTHY	
N 9455	REG. PLAN. BOARD	D 7	1977	184	UNSD	OBS	195	-6 TO	-11	5	1.25	95.5 01-00-77	NONE	UPGLAC	
N 9456	REG. PLAN. BOARD	D 7	1977	184	UNSD	OBS	361	-172 TO	-177	5	1.25	95.5 01-00-77	NONE	MAGOTHY	
N 9463	HICKSVILLE WD	D 7	1979	141	P.S.	WTDR	638	-419 TO	-497	70	20			MAGOTHY	14
N 9464	MARVIN SCHUR	E 7	1979	22	DOM	WTDR	330	-298 TO	-308	10	4	20 03-00-79	SURM	LLOYD	
N 9478	NASSAU CO DPW	E 6	1978	9	UNSD	OBS	24	-10 TO	-15	5	2	3.47 11-13-78	NONE	JPGLAC	
N 9488	HICKSVILLE WD	D 7	1979	161	UNSD	TEST	638						NONE		
N 9488	HICKSVILLE WD	D 7	1979	161	P.S.	WTDR	583			60	20			MAGOTHY	21
N 9489	S.L. LANG	D 7	1979	225	DOM	WTDR	198	32 TO	27	5	6	150 04-00-79	SURM	MAGOTHY	
N 9520	OYSTER BAY WD	E 7	1979	90	UNSD	TEST	556						NONE		
N 9520	OYSTER BAY WD	E 7		90	P.S.	WTDR		-361 TO	-422	61				PTWAO	
N 9593	H.D. KOHLER	E 7	1979	5	DOM	WTDR	370	-353 TO	-365	12	6			LLOYD	
N 9595	F.H. GILLMORE	E 7	1980	20	DOM	WTDR	467	-416 TO	-447	31	6	03 09-15-80	CENT	LLOYD	
N 9606	MICHAEL HURLEY	E 8		121	UNSD	TEST	203						NONE		
N 9606	MICHAEL HURLEY	E 8	1980	121	DOM	WTDR	134	-8 TO	-13	5	4	106 12-00-79	SURM	JPGLAC	



REFERENCE NO. 20

Summary of the Hydrologic Situation on Long Island, New York, as a Guide to Water-Management Alternatives

By O. L. FRANKE and N. E. McCLYMONDS

HYDROLOGY AND SOME EFFECTS OF URBANIZATION ON
LONG ISLAND, NEW YORK

GEOLOGICAL SURVEY PROFESSIONAL PAPER 627-F

*Prepared in cooperation with the New York
State Department of Conservation, Division
of Water Resources; the Nassau County
Department of Public Works; the Suffolk
County Board of Supervisors; and the
Suffolk County Water Authority*



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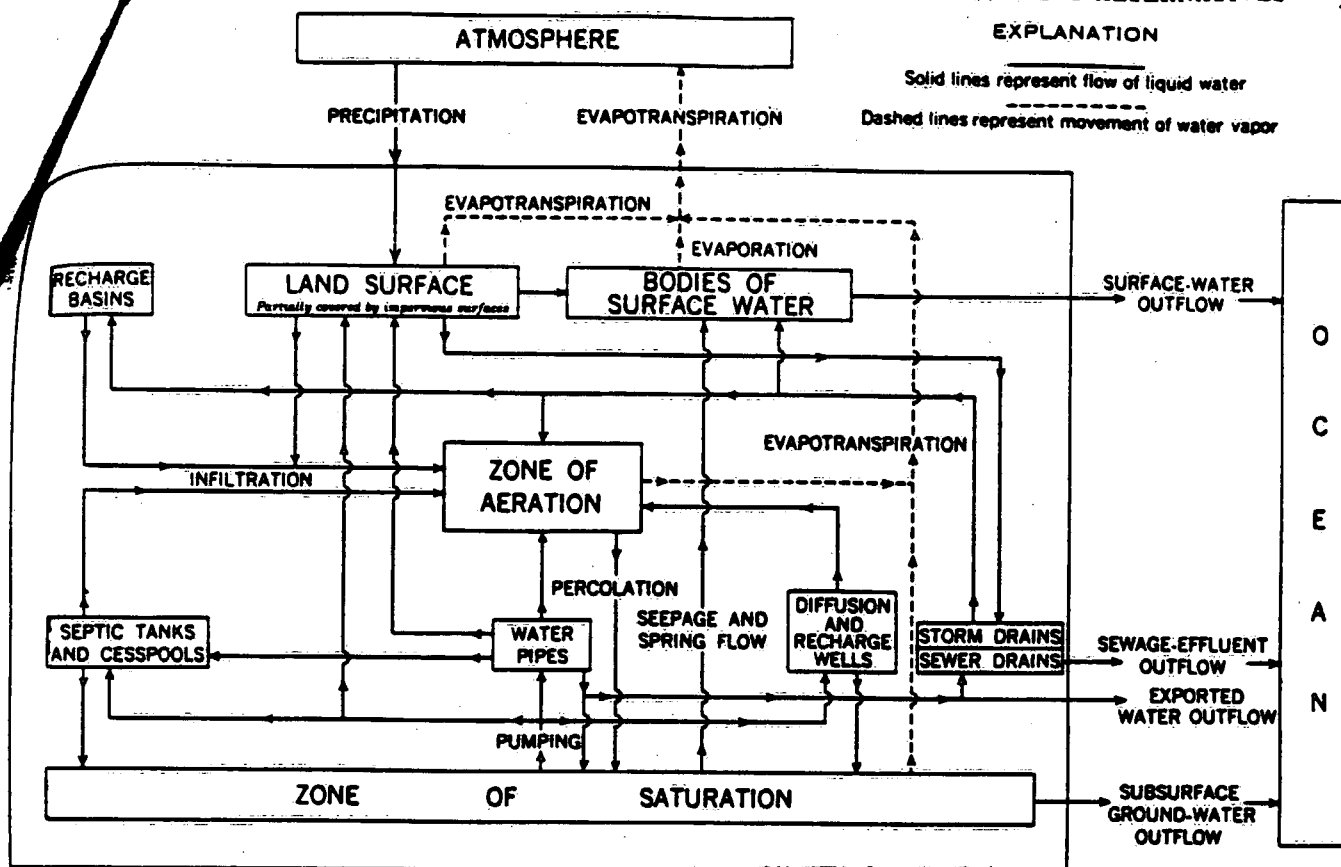


FIGURE 33.—Flow diagram of the hydrologic system, Nassau and Suffolk Counties, in the 1960's.

DISPOSAL OF DIRECT RUNOFF

Direct runoff from urban areas on Long Island flows by gravity through gutters and street inlets to storm sewers. The storm sewers generally transmit the runoff to either recharge basins or nearby streams (fig. 33).

RECHARGE BASINS

Recharge basins are unlined excavations in the glacial deposits; they range from about 10 to 20 feet in depth and from less than 1 to about 30 acres in area. In Nassau and Suffolk Counties there are more than 2,000 recharge basins, most of which are in the water-budget area. In the past two decades, most new housing and industrial developments in these counties have been required to include the construction of one or more basins, the size and number of which were related to the size of the drainage area. Moreover, most of the runoff from highways in these counties is collected in recharge basins. A recharge basin is generally used only where the water table is sufficiently deep to remain below the floor of the basin at least most of the time. Therefore, only a few recharge basins are located in nearshore areas where the water table is within a few feet of the land surface. In addition,

on Long Island many street inlets are open bottomed and, therefore, function as small recharge basins.

Seaburn (1970) studied the inflow of two recharge basins in residential developments in Nassau County. From the rainfall-inflow relation for one of these basins (fig. 34), Seaburn estimated that, on the average, about 15 percent of the total precipitation falling on the drainage area of the basin discharged into the basin. In this particular drainage area (15 acres) about 11 percent of the total drainage area was streets, and the total impervious area, including streets, sidewalks, driveways, and roofs was about 32 percent.

The total drainage area of all the recharge basins in Nassau and Suffolk Counties is probably on the order of 250 square miles at present (1968). If it is assumed that 15 percent of total rainfall on this area enters recharge basins and that virtually all this water recharges the ground-water reservoir, average annual recharge to the ground-water reservoir from these basins is on the order of 80 mgd. The assumption that most of the water entering a recharge basin ultimately recharges the ground-water reservoir is based on the observation that water entering most basins percolates into the ground fairly rapidly (commonly within a day or so).

REFERENCE NO. 21

Uncontrolled Hazardous Waste Site Ranking System

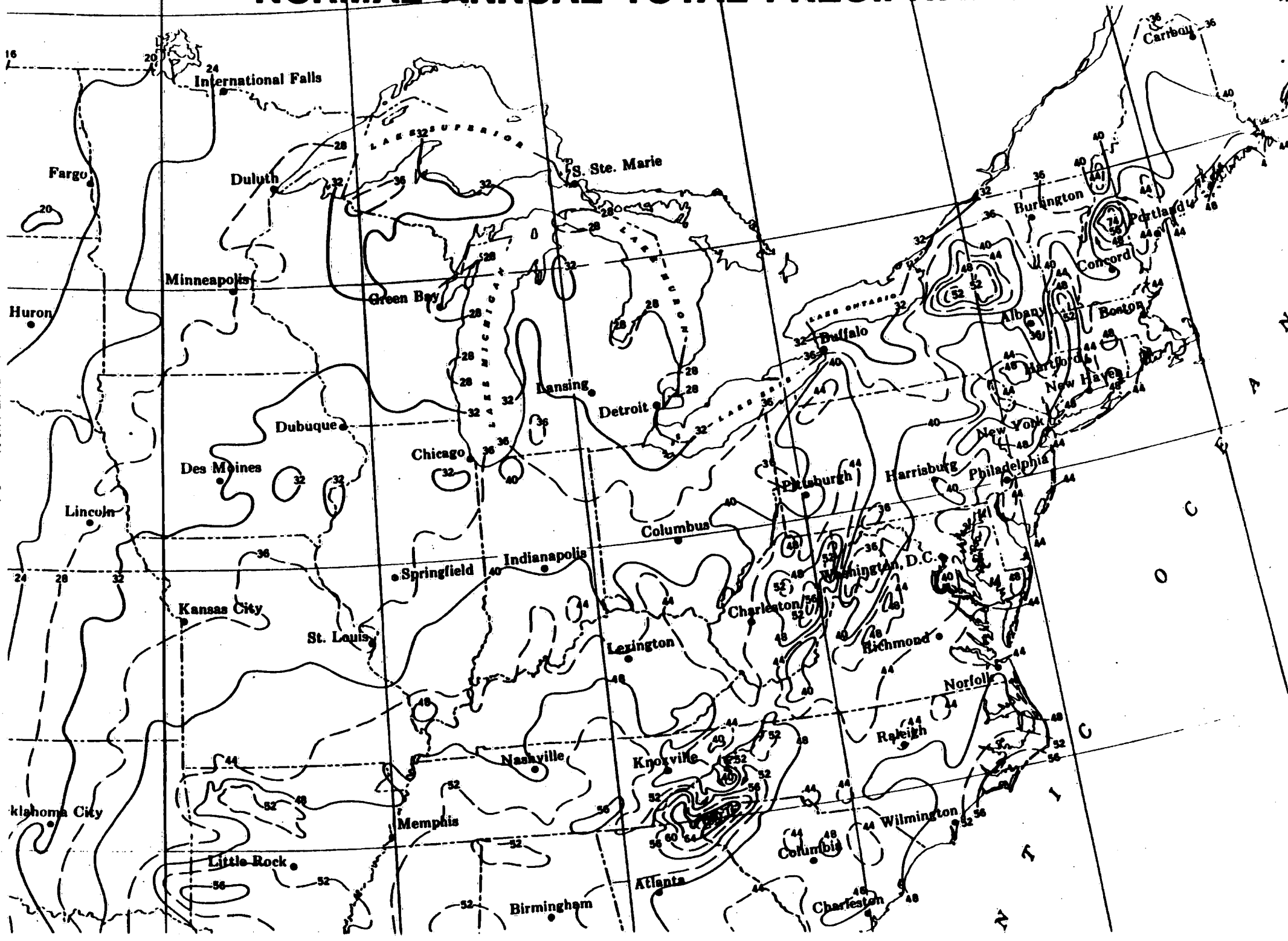
A Users Manual (HW-10)

Originally Published in
the July 16, 1982, *Federal Register*

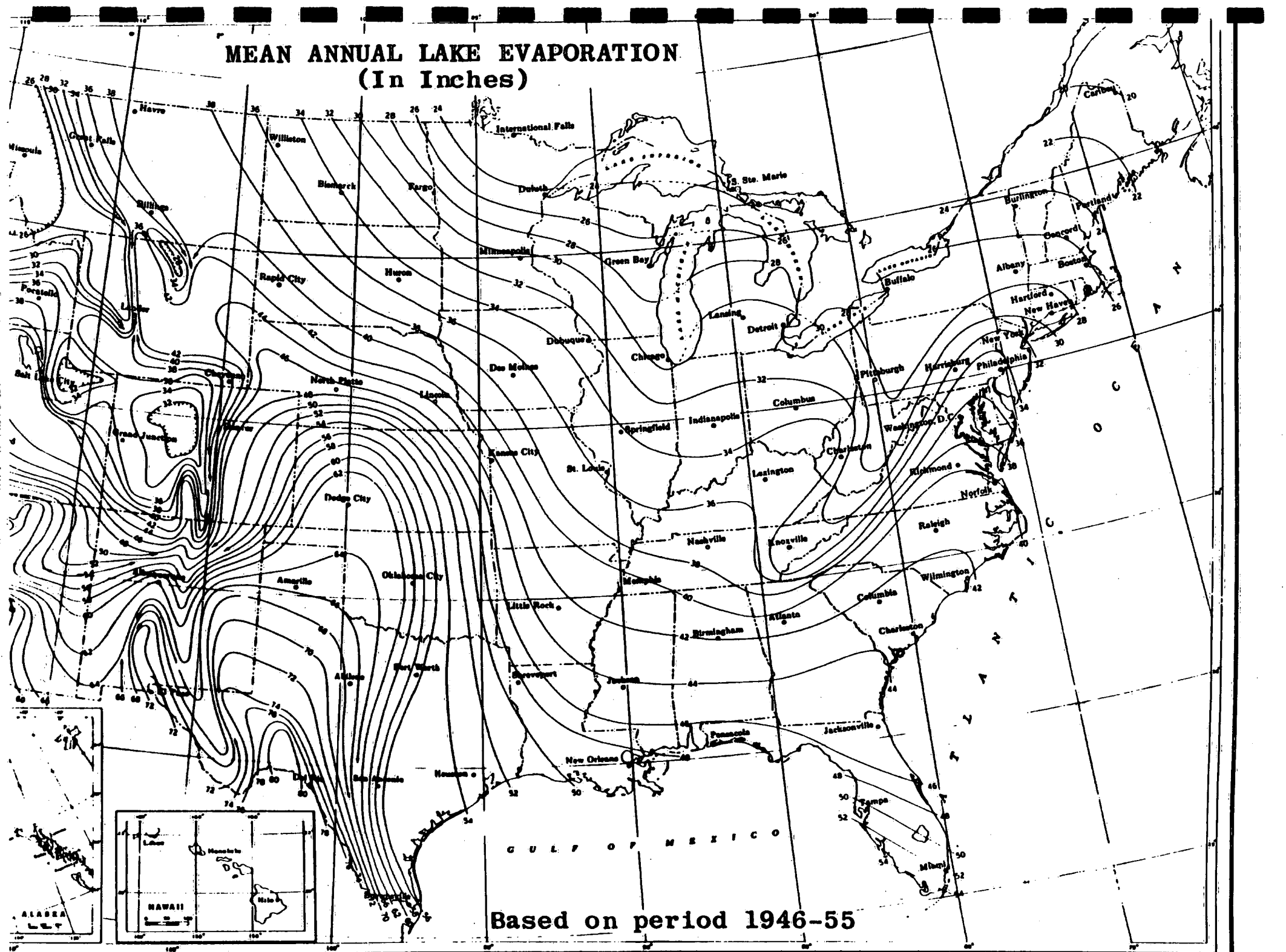
**United States
Environmental Protection
Agency**

1984

NORMAL ANNUAL TOTAL PRECIPITATION (Inches)



MEAN ANNUAL LAKE EVAPORATION (In Inches)



1 YEAR 24-HOUR RAINFALL (inches)

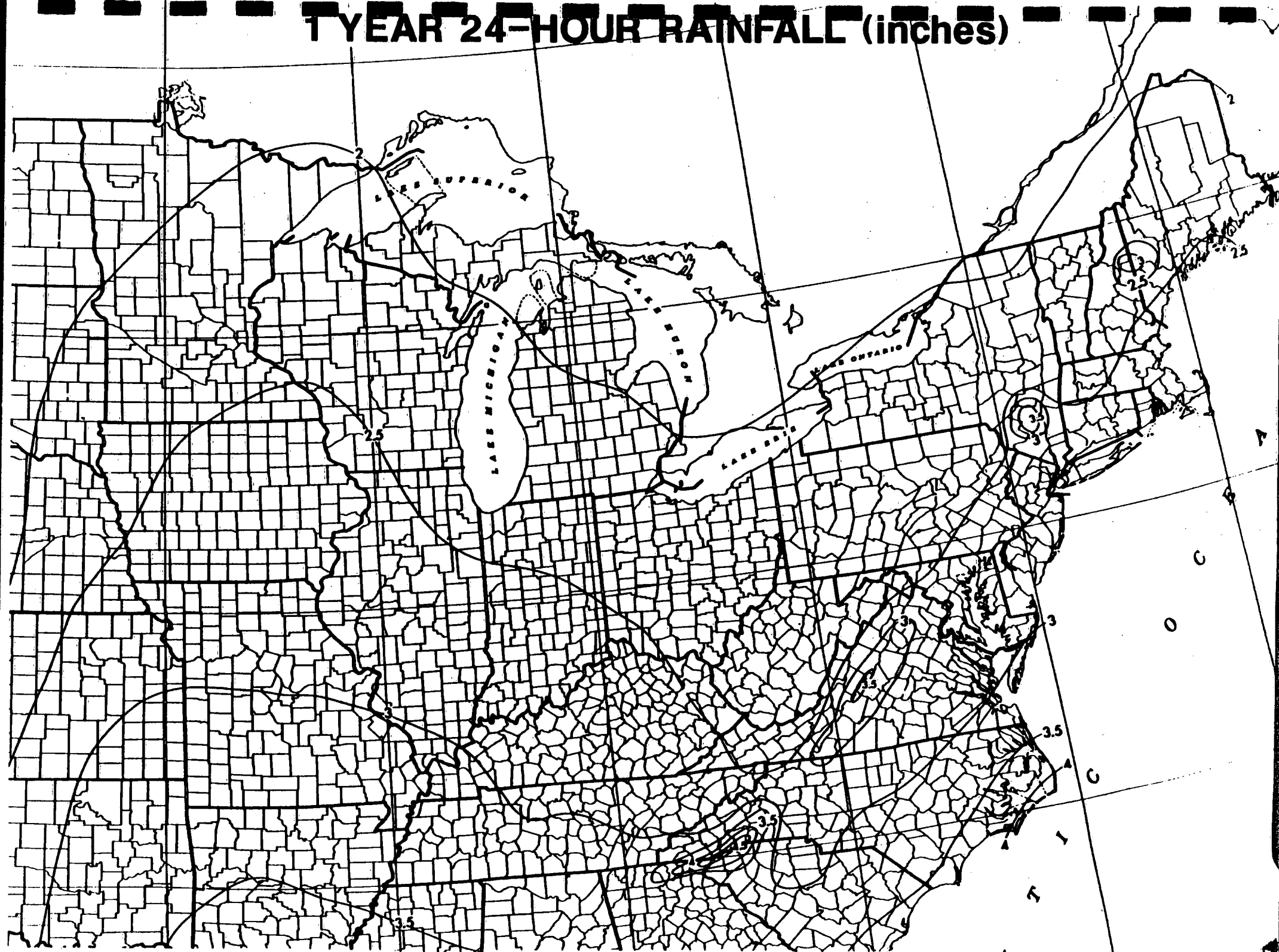


TABLE 2
PERMEABILITY OF GEOLOGIC MATERIALS*

Type of Material	Approximate Range of Hydraulic Conductivity	Assigned Value
Clay, compact till, shale; unfractured metamorphic and igneous rocks	$<10^{-7}$ cm/sec	0
Silt, loess, silty clays, silty loams, clay loams; less permeable limestone, dolomites, and sandstone; moderately permeable till	$10^{-5} - 10^{-7}$ cm/sec	1
Fine sand and silty sand; sandy loams; loamy sands; moderately permeable limestone, dolomites, and sandstone (no karst); moderately fractured igneous and metamorphic rocks; some coarse till	$10^{-3} - 10^{-5}$ cm/sec	2
Gravel, sand; highly fractured igneous and metamorphic rocks; permeable basalt and lavas; karst limestone and dolomite	$>10^{-3}$ cm/sec	3

*Derived from:

Davis, S. N., Porosity and Permeability of Natural Materials in Flow-Through Porous Media, R.J.M. DeWiest ed., Academic Press, New York, 1969

Freeze, R.A. and J.A. Cherry, Groundwater, Prentice-Hall, Inc., New York, 1979

REFERENCE NO. 22

Code of federal regulations

Protection of Environment

40

PART 261

Revised as of July 1, 1985

CONTAINING
A CODIFICATION OF DOCUMENTS
OF GENERAL APPLICABILITY
AND FUTURE EFFECT

AS OF JULY 1, 1985

With Ancillaries

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§ 261.21 Characteristic of ignitability.

(a) A solid waste exhibits the characteristic of ignitability if a representative sample of the waste has any of the following properties:

(1) It is a liquid, other than an aqueous solution containing less than 24 percent alcohol by volume and has flash point less than 60°C (140°F), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79 or D-93-80 (incorporated by reference, see § 260.11), or a Setaflash Closed Cup Tester, using the test method specified in ASTM Standard D-3278-78 (incorporated by reference, see § 260.11), or as determined by an equivalent test method approved by the Administrator under procedures set forth in §§ 260.20 and 260.21.

(2) It is not a liquid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical changes and, when ignited, burns so vigorously and persistently that it creates a hazard.

(3) It is an ignitable compressed gas as defined in 49 CFR 173.300 and as determined by the test methods described in that regulation or equivalent test methods approved by the Administrator under §§ 260.20 and 260.21.

(4) It is an oxidizer as defined in 49 CFR 173.151.

(b) A solid waste that exhibits the characteristic of ignitability, but is not listed as a hazardous waste in Subpart D, has the EPA Hazardous Waste Number of D001.

[45 FR 33119, May 19, 1980, as amended at 46 FR 35247, July 7, 1981]

§ 261.22 Characteristic of corrosivity.

(a) A solid waste exhibits the characteristic of corrosivity if a representative sample of the waste has either of the following properties:

(1) It is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5, as determined by a pH meter using either an EPA test method or an equivalent test method approved by the Administrator under the procedures set forth in §§ 260.20 and 260.21. The EPA test method for pH is specified as Method 5.2 in "Test

Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference, see § 260.11).

(2) It is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm (0.250 inch) per year at a test temperature of 55°C (130°F) as determined by the test method specified in NACE (National Association of Corrosion Engineers) Standard TM-01-69 as standardized in "Test Methods for the Evaluation of Solid Waste, Physical/Chemical Methods" (incorporated by reference, see § 260.11) or an equivalent test method approved by the Administrator under the procedures set forth in §§ 260.20 and 260.21.

(b) A solid waste that exhibits the characteristic of corrosivity, but is not listed as a hazardous waste in Subpart D, has the EPA Hazardous Waste Number of D002.

[45 FR 33119, May 19, 1980, as amended at 46 FR 35247, July 7, 1981]

§ 261.23 Characteristic of reactivity.

(a) A solid waste exhibits the characteristic of reactivity if a representative sample of the waste has *any* of the following properties:

(1) It is normally unstable and readily undergoes violent change without detonating.

(2) It reacts violently with water.

(3) It forms potentially explosive mixtures with water.

(4) When mixed with water, it generates toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(5) It is a cyanide or sulfide bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors or fumes in a quantity sufficient to present a danger to human health or the environment.

(6) It is capable of detonation or explosive reaction if it is subjected to a strong initiating source or if heated under confinement.

(7) It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure.

(8) It is a forbidden explosive as defined in 49 CFR 173.51, or a Class A explosive as defined in 49 CFR 173.53

or a Class B explosive as defined in 49 CFR 173.88.

(b) A solid waste that exhibits the characteristic of reactivity, but is not listed as a hazardous waste in Subpart D, has the EPA Hazardous Waste Number of D003.

§ 261.24 Characteristic of EP toxicity.

(a) A solid waste exhibits the characteristic of EP toxicity if, using the test methods described in Appendix II or equivalent methods approved by the Administrator under the procedures set forth in §§ 260.20 and 260.21, the extract from a representative sample of the waste contains any of the contaminants listed in Table I at a concentration equal to or greater than the respective value given in that Table. Where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering, is considered to be the extract for the purposes of this section.

(b) A solid waste that exhibits the characteristic of EP toxicity, but is not listed as a hazardous waste in Subpart D, has the EPA Hazardous Waste Number specified in Table I which corresponds to the toxic contaminant causing it to be hazardous.

TABLE I—MAXIMUM CONCENTRATION OF CONTAMINANTS FOR CHARACTERISTIC OF EP TOXICITY

EPA hazardous waste number	Contaminant	Maximum concentration (milligrams per liter)
D004	Arsenic	5.0
D005	Barium	100.0
D006	Cadmium	1.0
D007	Chromium	5.0
D008	Lead	5.0
D009	Mercury	0.2
D010	Selenium	1.0
D011	Silver	5.0
D012	Endrin (1,2,3,4,10,10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo, endo-5,8-dimethano-naphthalene).	0.02
D013	Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer).	0.4
D014	Methoxychlor (1,1,1-Trichloro-2,2-bis [p-methoxyphenyl]ethane).	10.0
D015	Toxaphene (C ₁₀ H ₁₀ Cl ₈ , Technical chlorinated camphene, 67-69 percent chlorine).	0.5

TABLE I—MAXIMUM CONCENTRATION OF CONTAMINANTS FOR CHARACTERISTIC OF EP TOXICITY—Continued

EPA hazardous waste number	Contaminant	Maximum concentration (milligrams per liter)
D016	2,4-D, (2,4-Dichlorophenoxyacetic acid).	10.0
D017	2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid).	1.0

Subpart D—Lists of Hazardous Wastes

§ 261.30 General.

(a) A solid waste is a hazardous waste if it is listed in this subpart, unless it has been excluded from this list under §§ 260.20 and 260.22.

(b) The Administrator will indicate his basis for listing the classes or types of wastes listed in this Subpart by employing one or more of the following Hazard Codes:

Ignitable Waste	(I)
Corrosive Waste	(C)
Reactive Waste	(R)
EP Toxic Waste	(E)
Acute Hazardous Waste	(H)
Toxic Waste	(T)

Appendix VII identifies the constituent which caused the Administrator to list the waste as an EP Toxic Waste (E) or Toxic Waste (T) in §§ 261.31 and 261.32.

(c) Each hazardous waste listed in this subpart is assigned an EPA Hazardous Waste Number which precedes the name of the waste. This number must be used in complying with the notification requirements of Section 3010 of the Act and certain record-keeping and reporting requirements under Parts 262 through 265 and Part 270 of this chapter.

(d) The following hazardous wastes listed in § 261.31 or § 261.32 are subject to the exclusion limits for acutely hazardous wastes established in § 261.5: EPA Hazardous Wastes Nos. FO20, FO21, FO22, FO23, FO26, and FO27.

[45 FR 33119, May 19, 1980, as amended at 48 FR 14294, Apr. 1, 1983; 50 FR 2000, Jan. 14, 1985]

§ 261.30 General.

EFFECTIVE DATE NOTE: At 50 FR 2000, Jan. 14, 1985, § 261.30(d) was revised, effective July 15, 1985. For the convenience of the user, the superseded text is set out below:

(d) The following hazardous wastes listed in § 261.31 or § 261.32 are subject to the exclusion limits for acutely hazardous wastes established in § 261.5: [Reserved]

§ 261.31 Hazardous wastes from non-specific sources.

The following solid wastes are listed hazardous wastes from non-specific sources unless they are excluded under §§ 260.20 and 260.22 and listed in Appendix IX.

Industry and EPA hazardous waste No.	Hazardous waste	Hazard code
Generic:		
F001.....	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; and sludges from the recovery of these solvents in degreasing operations.	(T)
F002.....	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, and trichlorofluoromethane; and the still bottoms from the recovery of these solvents.	(T)
F003.....	The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; and the still bottoms from the recovery of these solvents.	(I)
F004.....	The following spent non-halogenated solvents: cresols and cresylic acid, and nitrobenzene; and the still bottoms from the recovery of these solvents.	(T)
F005.....	The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, and pyridine; and the still bottoms from the recovery of these solvents.	(I, T)
F006.....	Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum.	(T)
F019.....	Wastewater treatment sludges from the chemical conversion coating of aluminum.....	(T)
F007.....	Spent cyanide plating bath solutions from electroplating operations.....	(R, T)
F008.....	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process.	(R, T)
F009.....	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process.	(R, T)
F010.....	Quenching bath residues from oil baths from metal heat treating operations where cyanides are used in the process.	(R, T)
F011.....	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations.	(R, T)
F012.....	Quenching waste water treatment sludges from metal heat treating operations where cyanides are used in the process.	(T)
F024.....	Wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of chlorinated aliphatic hydrocarbons, having carbon content from one to five, utilizing free radical catalyzed processes. (This listing does not include light ends, spent filters and filter aids, spent desiccants, wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in § 261.32.)	(T)
FO20.....	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of Hexachlorophene from highly purified 2,4,5-trichlorophenol.)	(H)
FO21.....	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives.	(H)

REFERENCE NO. 23

GRAPHICAL EXPOSURE MODELING SYSTEM

(GEMS)

USER'S GUIDE

VOLUME 2. MODELING

Prepared for:

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES AND TOXIC SUBSTANCES
EXPOSURE EVALUATION DIVISION

Task No. 3-2

Contract No. 68023970

Project Officer: Russell Kinerson

Task Manager: Loren Hall

Prepared by:

GENERAL SCIENCES CORPORATION
8401 Corporate Drive
Landover, Maryland 20785

Submitted: December 1, 1986

lilco hickaville

Lat: 40°45'55"N

Long: 73°30'44"W

List of Dataset: NYHE

Number of Records = 6

Group = 1

REC #	POP	HOUSE	DISTANCE	SECTOR
1	2249	732	0.400000	1
2	2819	934	0.810000	1
3	15259	4734	1.60000	1
4	58905	17733	3.20000	1
5	75858	22355	4.80000	1
6	79885	23798	6.40000	1

TOTAL POPULATION
2249

TOTAL No. Houses
732

DISTANCE
0.25

5068

1666

0.50

20327

6400

1.0

79232

24133

2.0

155090

46488

3.0

234975

70286

4.0

REFERENCE NO. 24

[6560-01]

[FRL 910-3]

AQUIFERS UNDERLYING NASSAU AND SUFFOLK COUNTIES, NEW YORK

Determination

Notice is hereby given that pursuant to Section 1424(e) of the Safe Drinking Water Act (42 U.S.C. 300f, 360h-3(e); 88 Stat. 1660 et seq.; Pub. L. 93-523) the Administrator of the Environmental Protection Agency has determined that the aquifer system underlying Nassau and Suffolk Counties, Long Island, New York, is the principal source of drinking water for these counties and that, if the aquifer system were contaminated, it would create a significant hazard to public health.

Background

The Safe Drinking Water Act was enacted on December 16, 1974. Section 1424(e) of the Act states: "If the Administrator determines, on his own initiative or upon petition, that an area has an aquifer which is the sole of principal drinking water source for the area and which, if contaminated, would create a significant hazard to public health, he shall publish notice of that determination in the *FEDERAL REGISTER*. After the publication of any such notice, no commitment for Federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which the Administrator determines may contaminate such

aquifer through a recharge zone so as to create a significant hazard to public health but a commitment for Federal financial assistance may, if authorized under another provision of law, be entered into to plan or design the project to assure that it will not so contaminate the aquifer."

On January 21, 1975, the Environmental Defense Fund petitioned the Administrator to designate the aquifers underlying Nassau and Suffolk Counties, Long Island, New York, as a sole source aquifer under the provisions of the Act. A notice of receipt of this petition, together with a request for comments, was published in the *FEDERAL REGISTER*, Thursday, June 12, 1975. Written comments were submitted by the Environmental Defense Fund (EDF) on August 7, 1975, supporting their petition. A letter from the Director of the Nassau-Suffolk Regional Planning Board, dated October 1, 1976, requested that designation be delayed until after the completion of the areawide waste management (208) planning process for Long Island.

Because of the limited response to the *FEDERAL REGISTER* notice, EPA issued a press release and mailed an information sheet to elected officials and environmental groups on Long Island in March 1977. In addition, a presentation was made to the Citizens Advisory Committee (CAC) of the 208 planning agency and to the executive committee of the Long Island Water Conference. In response to these activities EPA received three comments: a letter from EDF questioning why project review would exclude direct Federal projects, a letter from a member of the East Hampton Planning Board expressing support for the designation, and a letter from the CAC requesting that designation be delayed until after the completion and approval of the Long Island 208 plan.

In considering the comments received, we could not agree with the letters requesting further delay since we do not believe that the review process under Section 1424(e) will constrain the options of 208 planning.

On the basis of the information which is available to this Agency, the Administrator has made the following findings, which are the basis for the determination noted above:

(1) The aquifers underlying Nassau and Suffolk Counties are the sole or principal drinking water source for the area. They supply good quality water for about 2.5 million people. Current water supply treatment practice for public supplies is generally limited to disinfection for drinking purposes, with some plants capable of nitrate removal. There are also numerous private sources. There is no alternative source of drinking water supply which could economically replace this aquifer system.

(2) The aquifer system is vulnerable to contamination through its recharge zone. Since contamination of a ground-water aquifer can be difficult or impossible to reverse, contamination of the the aquifer system underlying Nassau and Suffolk Counties, New York, would pose a significant hazard to those people dependent on the aquifer system for drinking purposes.

Among the determinations which the Administrator must make in connection with the designation of an area under Section 1424(e) is that the area's sole or principal source aquifer or aquifers, "if contaminated, would create a significant hazard to public health" Obviously, threats to the quality of the drinking water supply for such a large population could create a significant hazard to public health. The EPA does not construe this provision to require a determination that projects planned or likely to be constructed will in fact create such a hazard; it is sufficient to demonstrate that approximately 2.5 million people depend on the aquifer system underlying Nassau and Suffolk Counties as their principal source of drinking water, and that the aquifer system is vulnerable to contamination through its recharge zone.

Section 1424(e) of the Act requires that a Federal agency may not commit funds to a project which may contaminate the aquifer system through a recharge zone so as to create a significant hazard to public health. The recharge zone is that area through which water enters into the aquifer system. Because of groundwater movement within these aquifers, the recharge zone is considered to be the entire area of Nassau and Suffolk Counties. However, both horizontal and vertical boundaries of the recharge zone are discussed in the background document under the section entitled "Area of Consideration."

The data upon which these findings are based are available to the public and may be inspected during normal business hours at the office of the Environmental Protection Agency, Region II, 26 Federal Plaza, New York, New York 10007. It includes a support document for designation of the aquifers underlying Nassau and Suffolk Counties, New York, and maps of the area within which projects will be subject to review.

A copy of the above documentation is also available at the U.S. Waterside Mall, Environmental Protection Agency, Public Information and Reference Unit, Room 2922, 401 M Street S.W., Washington, D.C. 20460.

The EPA has issued proposed regulations for the selective review of Federal financially assisted projects which may contaminate the aquifer system underlying Nassau and Suffolk Counties, New York, through the recharge

zone so as to create a significant hazard to public health. These proposed regulations were published in the *Federal Register* issue of September 29, 1977, and public comments were requested. They will be used as interim guidance for project review until their promulgation during 1978.

EPA, Region II, is working with the Federal agencies which may in the near future fund projects in the area of concern to EPA to develop inter-agency procedures whereby EPA will be notified of proposed commitments for projects which could contaminate the bicounty area's sole source aquifer system. Although the project review process cannot be delegated, the Regional Administrator in Region II will rely to the maximum extent possible upon any existing or future State and local control mechanisms in protecting the ground-water quality of the aquifer system underlying Nassau and Suffolk Counties, New York. Included in the review of any Federal financially assisted project will be coordination with the State and local agencies. Their determinations will be given full consideration and the Federal review process will function so as to complement and support State and local mechanisms.

Dated: June 12, 1978.

DOUGLAS M. COSTLE
Administrator.

(FR Doc. 78-17067 Filed 6-20-78; 8:45 am)

REFERENCE NO. 25

PRELIMINARY ASSESSMENT
OFF SITE RECONNAISSANCE
INFORMATION REPORTING FORM

Date: 11 Pvs 8/12/89
1/10/89

Site Name: LILCO-Hicksville

TDD: 02-8901-14

Site Address: OLD Country RD.
Street, Box, etc.

HICKSVILLE
Town

Nassau
County

N.Y.
State

NUS Personnel:	Name	Discipline
	<u>Pete von Schondorf</u>	<u>Geologist</u>
	<u>Brian Dietz</u>	<u>Env. Scientist</u>
	<u>Jeff Hannay</u>	<u>Env. Scientist</u>

Weather Conditions (clear, cloudy, rain, snow, etc.):
Clear

Estimated wind direction and wind speed: N-NW ~ 10 MPH

Estimated temperature: 40° F

Signature: Pete von Schondorf Date: 1/11/89

Countersigned: Brian Dietz Date: 1/18/89

PRELIMINARY ASSESSMENT
INFORMATION REPORTING FORM

Date: 1/11/89

Site Name: ULCO-Hicksville

TDD: 02-8901-14

Site Sketch:

Indicate relative landmark locations (streets, buildings, streams, etc.).
Provide locations from which photos are taken.

See Attached site plan

Signature: *Pete von Schandorf*

Date: 1/11/89

Countersigned: *Brian Doty*

Date: 1/18/89

PRELIMINARY ASSESSMENT
INFORMATION REPORTING FORM

Date: 1/11/89

Site Name: ULCO-Hicksville

TDD: 02-8901-14

Notes (Periodically indicate time of entries in military time):

Arrive at site 1150

Site is a large complex of office and utility buildings. The facility is set-back from the road(s) approx 50-100 yds. and enclosed by a guarded fence. From the roadways utility buildings and garages (for service trucks), as well as service vehicles can be seen. Site is flat and well maintained. All runoff from site appears to remain on site. Facility is located in a commercial area with residential housing within 0.25 miles.

Leave site 1205

Signature: Pete von Schouder
Countersignature: Brian Duetz

Date: 1/11/89
Date: 1/18/89

PRELIMINARY ASSESSMENT INFORMATION REPORTING FORM

Date: _____

Site Name: _____

TDD: _____

Notes (Cont'd):

pas 1/14/89

Attach additional sheets if necessary. Provide site name, TDD number, signature, and countersignature on each.

Signature: _____

Date: _____

Countersignature: _____

Date: _____

PRELIMINARY ASSESSMENT

Date: 1/11/89

Site Name: LICU - Hicksville

TDD: 02-8901-14

Photolog:

**Frame/Photo
Number**

Date

Time

Photographer

Description

P-15

1-11-89

11:50

P/S

LILCO NE ENTRANCE

P-16

1-11-89

12:02

PVS

LILCO MAIN ENTRANCE

Attach additional sheets if necessary. Provide site name, TDD number, signature, and countersignature on each.

Signature

Signature: Patricia A. Schomberg

Date:

Date: 1/11/89

Countersignature:

Countersignature: Brian Deety

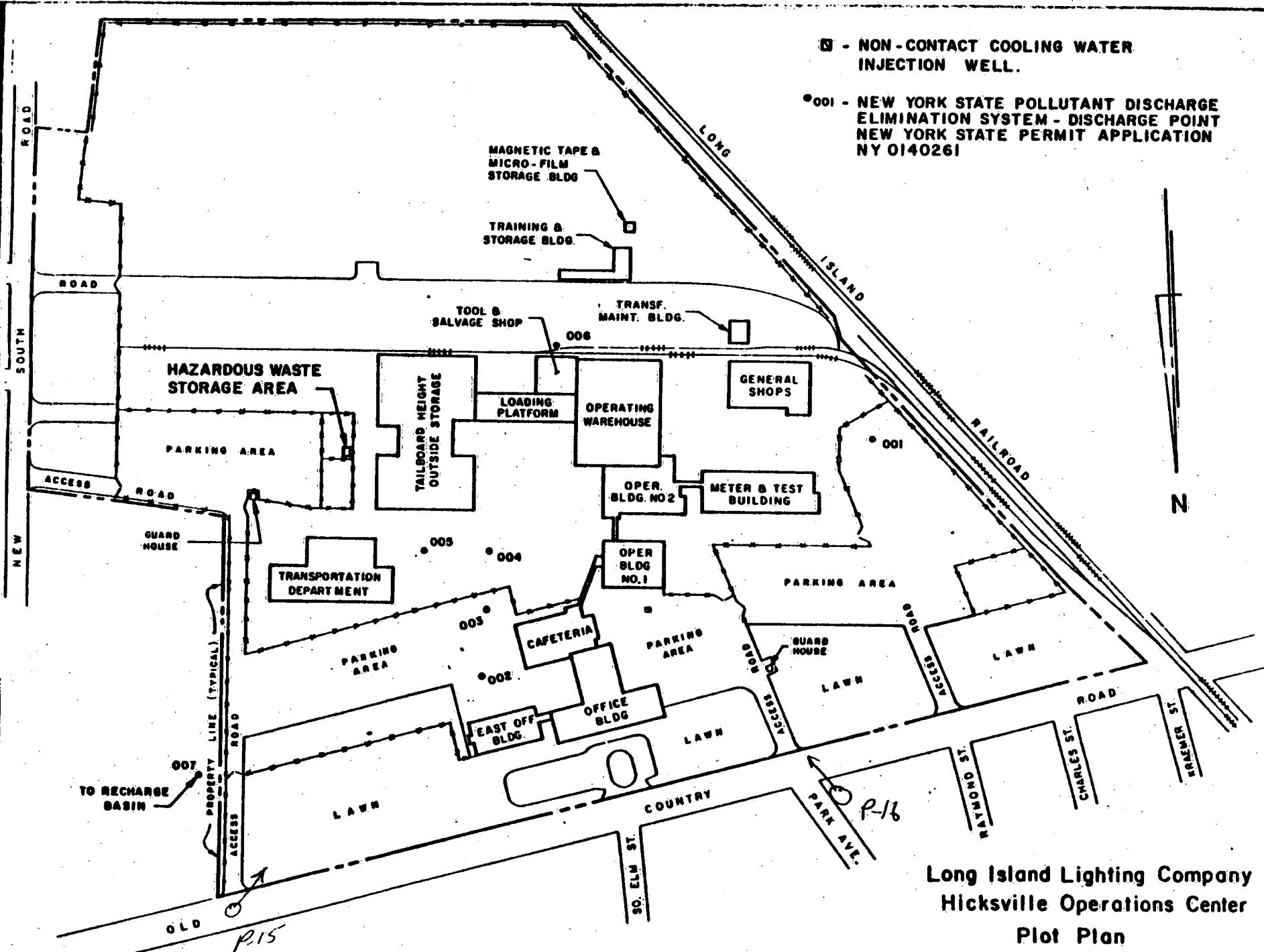
Date:

Date: 11/8/89

100-565004

■ - NON-CONTACT COOLING WATER
INJECTION WELL.

●001 - NEW YORK STATE POLLUTANT DISCHARGE
ELIMINATION SYSTEM - DISCHARGE POINT
NEW YORK STATE PERMIT APPLICATION
NY 0140261



PLOT PLAN

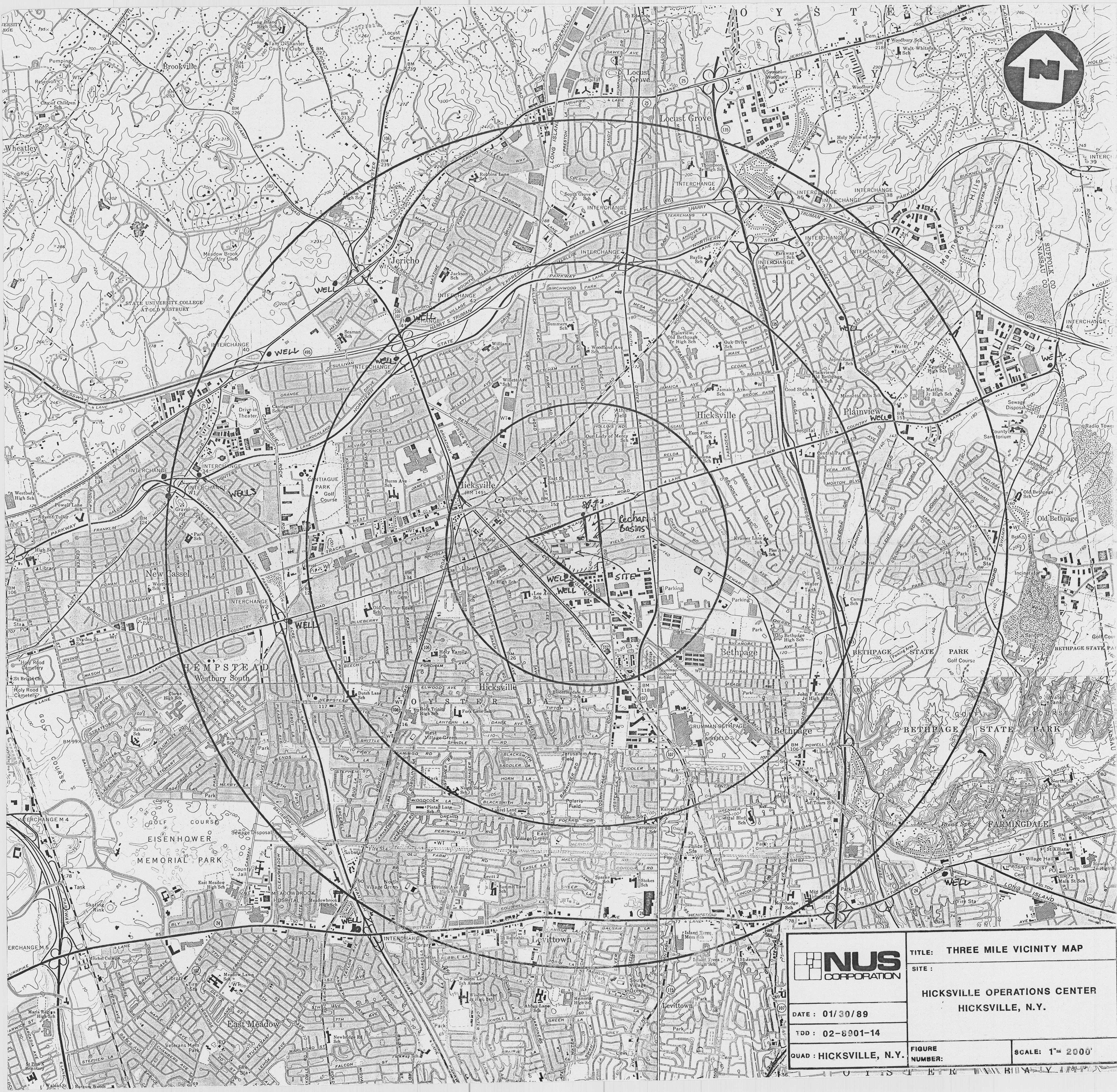
SCALE: 1" = 300'


Long Island Lighting Company
Hicksville Operations Center

Plot Plan

RCRA - Storage Permit Application
No. NYD0006866008 - NOV. 1980

REFERENCE NO. 26



	TITLE: THREE MILE VICINITY MAP	
	SITE: HICKSVILLE OPERATIONS CENTER HICKSVILLE, N.Y.	
DATE: 01/30/89	FIGURE NUMBER:	
TDD: 02-8901-14	SCALE: 1" = 2000'	
QUAD: HICKSVILLE, N.Y.		